

26. Faculty serving in

a) National committees b) International committees c) Editorial Boards d) any other (please specify) : Nil

b) International committees : Nil

c) Editorial Boards : Nil

d) any other (please specify) : Nil

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs). (w.e.f. 1st June 2009 to 28th February 2015)

Dr. K.S.Charak

A. International

1. International Workshop on Transcendental Dynamics, Banach International Mathematical Centre, Warsaw, Poland, November 8-13, 2010.
2. International Workshop on Complex Analysis and its Applications Walchand College of Engineering, Sangli Maharashtra, June 11-15, 2012.
3. Summer School, "Normal Families in complex Analysis", Institute fur Mathematik, Universitat, Wuzburg, Germany, May 22-29, 2015.
4. International Congress of Mathematics – 2010 India, Hyderabad, August 19-27, 2010.
5. International Conference on Computational Methods and Function Theory, University of Shantou, P.R. China June 10-14, 2013.
6. International Symposium on Complex Analysis and Conformal Geometry (ISCACG), IIT Indore, December 28-30, 2013.
7. International Conference on Modern Aspects of Complex Analysis, University of Wurzburg, Germany, May 29-30, 2015.
8. International Conference on Analysis and its Applications, Aligarh Muslim University, Aligarh, December 19-21, 2015.

Dr. Shallu Sharma

1. General Orientation Course organized by Academic Staff College, University of Jammu from 03.07.2012 to 31.07.2012 (28 days)
2. Refresher Course in Computer Science and IT(ID) organized by Academic Staff College, University of Jammu from 18.12.2012 to 08.01.2013 (22 days)

Dr. Tirath Ram

International

1. International Workshop on Complex Analysis and Applications from Walchand College of Engineering Sangli (MS) June 11-15, 2012.

National

1. General Orientation Course organized by Academic staff college, University of Jammu from 20th November, 2012 to 17th December 2012.
 2. Refresher Course organized by Academic Staff College, BAMU, Aurangabad (Maharashtra).
 3. Successfully completed National Workshop on Latex, from 8th–10th July 2013 organized by School of Applied Sciences, Chitkara University, Punjab.
 4. Brainstorming Session/Awareness Workshop organized by the University of Jammu in collaboration with J&K State Science Council for Science Council for Science and Technology, Govt. of India on 25th September, 2012.
28. Student projects (w.e.f. 1st June 2009 to 28th February 2015)
- a. percentage of students who have done in-house projects including inter-departmental projects : Nil
 - b. percentage of students doing projects in collaboration with other universities / industry / institute : Nil
29. Awards / recognitions received at the national and international level by
- a. Faculty (w.e.f. 1st June 2009 to 28th February 2015): Nil
 - b. Doctoral / post doctoral fellows : Nil
 - c. Students : Nil
30. Seminars / Conferences / Workshops organized and the source of funding (national / international) with details of outstanding participants, if any. (w.e.f. 1st June 2009 to 28th February 2015)

National Seminar

- i) Recent Trends in Analysis and Topology, February 26-28, 2009.
 - ii) Topologic Algebraic Analysis, February 26-28, 2010.
 - iii) Analysis and its Applications, February 25-27, 2011.
 - iv) Recent Development in Complex Analysis and Related Areas, February 24-25, 2012.
 - v) Recent Trends in Analysis and Topology, February 26-28, 2013.
31. Code of ethics for research followed by the departments : Nil

32. Student profile programme-wise: (w.e.f. 1st June 2009 to 28th February 2015).

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc 2009	455	23	32	90%	92%
2010	750	19	33	88%	90%
2011	620	21	30	82%	84%
2012	540	21	35	86%	90%
2013	476	23	29	90%	92%
2014	451	25	32	Appearing	Appearing
M.Phil 2009	40	4	6	100%	100%
2010	37	2	2	100%	100%
2011	42	Nil	1	100%	100%
2012	32	2	2	100%	100%
2013	29	6	3	100%	100%
2014	42	Nil	2	100%	100%
Ph.D 2009	01	1	Nil		
2010	05	3	2		
2011	3	1	2		
2012	2	2	Nil		
2013	5	3	2		
2014	2	Nil	1		

33. Diversity of students (w.e.f. 1st June 2009 to 28th February 2015)

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc	100%	Nil	Nil	Nil
M.Phil	100%	Nil	Nil	Nil
Ph.D	100%	Nil	Nil	Nil

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. (w.e.f. 1st June 2009 to 28th February 2015)

Civil Services : Nil

Defence : 02

NET : 13

SET : Nil

Other : Nil

35. Student progression (w.e.f. 1st June 2009 to 28th February 2015)

Student progression	Percentage against enrolled
UG to PG	10%
PG to M.Phil.	10%
PG to Ph.D.	2%
Ph.D. to Post-Doctoral	Nil
Employed	
• Campus selection	Nil
• Other than campus recruitment	50%
Entrepreneurs	Nil

36. Diversity of staff

Percentage of faculty who are graduates	
of the same University	100%
from other universities within the State	Nil
from universities from other States	Nil
from universities outside the country	Nil

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period (w.e.f. 1st June 2009 to 28th February 2015) : Nil

38. Present details of departmental infrastructural facilities with regard to

a. Library : 834 Books

b. Internet facilities for staff and students : 10 Computers with internet facility

c. Total number of class rooms : 03

- d) Class rooms with ICT facility : Nil
 - e) Students' laboratories : 01
 - f) Research laboratories : Nil
39. List of doctoral, post-doctoral students and Research Associates (w.e.f. 1st June 2009 to 28th February 2015)
- a. from the host institution/university
 - b. from other institutions/universities
1. Mr. Kulwant Singh
 2. Mr. Sunil Sharma
 3. Mr. Pankaj Mansotra
 4. Ms. Nidhi Suri
 5. Mr. Varinder Pal Singh
 6. Mr. Pawan Kumar
 7. Mr. Ashok Kumar
 8. Ms. Kamaljit Kour
 9. Ms. Anshu Sharma
 10. Mr. Ajay Kumar
 11. Mr. Narinder Kumar
 12. Mr. Ravinder Kumar
 13. Mr. Sumit Dubey
 14. Ms. Sushma Chib
 15. Mr. Sandeep Sharma
 16. Mr. Sandeep Sharma
 17. Ms. Renu
 18. Mr. Zaheer Abbas
40. Number of post graduate students getting financial assistance from the university.
- Nil
41. Was any need assessment exercise undertaken before the development of new programme(s)?
If so, highlight the methodology.
- Nil

42. Does the department obtain feedback from
- faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? Nil
 - students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? Nil
 - alumni and employers on the programmes offered and how does the department utilize the feedback? Nil
43. List the distinguished Alumni of the department (maximum 10)
1. Prof. D.S Jamwal, Head Department of Mathematics, University of Jammu.
 2. Dr. Romesh Kumar, Associate Professor, University of Jammu
 3. Dr. Abdul Khaliq, Associate Professor, University of Jammu
 4. Dr. K.S.Charak, Associate Professor, University of Jammu
 5. Dr. Shallu Sehgal, Assistant Professor, University of Jammu
 6. Dr. Tirth Ram, Associate Professor, University of Jammu
 7. Dr. Chanchal Kumar, Associate Professor, IISR, Mohali, Chandigarh
 8. Mr. H.D Gupta, Joint Director, Planning Department, J&K State.
 9. Prof. V.K. Bhat, SMVDU, Katra
 10. Dr. Ajay Kumar, Assistant Professor, SMVDU, Katra.
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts. (w.e.f. 1st June 2009 to 28th February 2015) : Nil
45. List the teaching methods adopted by the faculty for different programmes.
- Lectures, Seminars, Discussions
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
- By discussing in the DAC and DRC
47. Highlight the participation of students and faculty in extension activities. (w.e.f. 1st June 2009 to 28th February 2015)
- Nil
48. Give details of “beyond syllabus scholarly activities” of the department.
- Regular holding of Seminars, popular Lectures, excursions etc.
49. State whether the programme/ department is accredited / graded by other agencies? If yes, give details. : Nil

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

The Department Faculty and research scholars are actively involved in research and contributing in generating knowledge by publishing their research outputs in books and journals.

The most important contribution of the department of Mathematics is the creation of Mathematical Society, known as the Jammu Mathematical Society, in 1990 under the dynamics leadership of Prof. R.K. Singh, the then Head of the Department. As a matter of fact, this society has joined the platform to this part of the country through which we organize various academic activities like, National/International seminars, conferences, workshops, lectures series a mathematician in residence programme etc. Through this society, the department has been able to do extension activities in Mathematics for college & school students. As a talent hunt programme, we organize student conferences and written mathematical competition annually. This exercise has proved the most productive in creating awareness and going necessary exposure to the young students pursuing mathematics as career. Presently the society has about 600 life members both from India and abroad the department strives hard to carry further their activities and promise to be on the path of excellence.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

1. Dedicated teaching
2. Healthy relationship with students
3. Cohesiveness within Faculty, Staff and Students
4. Regular organization of Academic Activities, Workshops, Conferences, Seminars etc.
5. Good publications and availability of modern research tools in the Departmental laboratory.

Weaknesses

1. Lack of Supporting Technical Staff
2. Inadequate washrooms especially for physically disabled

Opportunities and Challenges

1. Optimum use of library resources
2. Inadequate use of computational facilities
3. Improvement in research outputs
4. Publications in world's best journals of Mathematics
5. Updating syllabi as per market requirements.

52. Future plans of the department.

1. To get financial aid under SAP
2. To organize an International Conference
3. To get placement drive conducted for the students of the Department
4. To motivate all faculty members to get major Research Projects from UGC/DST/MOSPI etc.

EVALUATIVE REPORT OF THE DEPARTMENT

1. Name of the Department: Department of Statistics
2. Year of establishment: 1988
3. Is the Department part of a School/Faculty of the university?
Faculty of Mathematical Sciences
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) PG, M.Phil., Ph.D.
5. Interdisciplinary programmes and departments involved: Nil
6. Courses in collaboration with other universities, industries, foreign institutions, etc.: Nil
7. Details of programmes discontinued, if any, with reasons:
No programme has been discontinued.
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System
Semester/ Choice Based Credit System
9. Participation of the department in the courses offered by other departments:
Yes, Under Choice Based Credit System
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled Under Direct Recruitment	Filled Under Career Advancement Scheme	Total
Professor	-	-	2	02
Associate Professors	01	-	1	01
Assistant Professors	06	04	-	02
Contractual	-	-	-	02

11. Faculty profile with name, qualifications, designation, area of specialization, experience and research under guidance

Name of the faculty Member	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. and M.Phil. students guided in the last 5 years
Prof. J.P. Singh Joorel	Ph.D	Professor & Dean	Statistical Inference, Sample Survey and Reliability Theory	27	9
Prof. Rahul Gupta	Ph.D	Professor & Head	Statistical Inference	22	7
Dr. Pawan Kumar	Ph.D	Associate Professor	Reliability Theory	16	7
Dr. Parmil Kumar	Ph.D	Assistant Professor	Information Theory	14	7
Dr. V.K. Shivgotra	Ph.D	Assistant Professor	Reliability Theory and Biostatistics	12	2

12. List of senior Visiting Fellows, Adjunct Faculty, Emeritus Professors: Nil
13. Percentage of classes taken by temporary faculty – programme-wise information 10%
14. Programme-wise Student Teacher Ratio

M.Sc	M.Phil	Ph.D
11:1	1:1	4:1

15. Number of academic support staff (technical) and administrative staff: Sanctioned, filled and actual

Sanctioned	Filled	Actual
05	04	04

16. Research thrust areas as recognized by major funding agencies:
1. Reliability Analysis
 2. Sampling Theory
 3. Inference
 4. Information Theory
 5. Bio Statistics.

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. (w.e.f. 1st June 2009 to 28th February 2015): Nil
18. Inter-institutional collaborative projects and associated grants received
 - a) National collaboration: Nil b) International collaboration: Nil
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received: (w.e.f. 1st June 2009 to 28th February 2015)
 - (i) Received DST-FIST financial assistance of Rs.0.90 lacs under “ Maintenance of Equip-ment Head.”
 - (ii) Financial Assistance of Rs.40 lacs under non-SAP from UGC.
20. Research facility / centre with
 - a. state recognition: Nil
 - b. national recognition: Nil
 - c. international recognition: Nil
21. Special research laboratories sponsored by / created by industry or corporate bodies: Nil
22. Publications: (w.e.f. 1st June 2009 to 28th February 2015)
 - * Number of papers published in peer reviewed journals (national / international) 66
 - * Monographs: Nil
 - * Chapters in Books : 2
 - * Edited Books: Nil
 - * Books with ISBN with details of publishers: Nil
 - * Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) Nil
 - * Citation Index – range / average: Nil
 - * SNIP: Nil
 - * SJR: Nil
 - * Impact Factor – range / average : NA
 - * h-index :NA

23. Details of patents and income generated (w.e.f. 1st June 2009 to 28th February 2015):
Nil
24. Areas of consultancy and income generated (w.e.f. 1st June 2009 to 28th February 2015):
Nil
25. Faculty selected nationally / internationally to visit other laboratories / institutions
 - a. industries in India and abroad (w.e.f. 1st June 2009 to 28th February 2015): **Nil**
26. Faculty serving in
 - a) National committees b) International committees c) Editorial Boards d) any other (please specify)
 - a) National committees:

Prof. J.P. Singh Joorel

- (i) Member of the Governing Body (UGC Nominee) of Audisankara College of Engineering and Technology, Gudur, Nellore, Andhra Pradesh for the period 2014-2019.
- (ii) Member Board of Governing Body of Neelam College of Engineering and Technology Agra, affiliated to UP Technological University, Lucknow.
- (iii) Chairman/Member of UGC expert committees.
- b) International committees: Nil
- c) Editorial Boards:
 - i) Prof. J.P. Singh Joorel: JISA, JRSS, ASR, JSAPL, JSAP, IJOR
 - ii) Prof. Rahul Gupta: JSAPL, AMR, JRSS
 - iii) Dr. Pawan Kumar: MESA, JSAPL, JSAP
 - vi) Dr. Parmil Kumar: IJSA, JSAPL, JSAP
 - v) Dr. V.K. Shivgotra: IJSA
- d) Any other (please specify): Nil
27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).
(w.e.f. 1st June 2009 to 28th February 2015):
 1. **Dr Parmil Kumar, Dr. Pawan Kumar and Dr. V K Shivgotra**
 - i) One week National Workshop on “Basic Econometrics” in Shri Mata Vaishno Devi University, 3-8, March 2014.

- ii) International Workshop on “Optimization Techniques and Simulation” held at Department of Statistics, University of Kashmir, Srinagar, October 19-23, 2013

2. Dr. Pawan Kumar and Dr. V K Shivgotra

- i) National Workshop on LATEX held at School of Applied Sciences, Chitkara University, Punjab, July 8-10, 2013.
- ii) Faculty Improvement Programme on MS Power Point organised by Department of Lifelong Learning, University of Jammu, October 31 November, 17, 2011.
- iii) ST Course on Operations Research for Effective Managerial Decision Making organised by IIT, Delhi, October 17-21, 2011.
- iv) National Workshop on Applied Mathematics organised by Department of Statistics, MD University, Rohtak, 28-30, March 2012.

3. Dr V K Shivgotra

- i) Five days Training Programme on ‘Clinical Trials and Meta Analysis, held at CMC, Vellore, June 1-5, 2009.
- ii) Three days Workshop on ‘Creation of Database Using Microsoft Access” held at NIRRH Mumbai organised by ICMR, June 16-18, 2009.
- iii) 14 Days AICTE Sponsored Faculty Development Programme on “Application of Econometrics and Time Series Techniques in Business,” at SMVDU, Katra May 20-June 2, 2013.
- iv) Refresher Course in Mathematics/Statistics conducted by Academic Staff College, BAMU, Aurangabad, Maharashtra, December 3-23, 2013.

28. Student projects (w.e.f. 1st June 2009 to 28th February 2015)

- a. Percentage of students who have done in-house projects including inter-departmental projects: Nil
- b. Percentage of students doing projects in collaboration with other universities/ industry / institute: Nil

29. Awards / recognitions received at the national and international level by

- a. Faculty : Nil
- b. Doctoral / post doctoral fellows : Nil
- c. Students:

2 (National Recognitions)

- 1. Rahul K Sharma, awarded best poster presentation in National Meet of Research Scholars in Mathematical Sciences held in University of Jammu, Dec 8-12, 2014, and

2. Isha Gupta awarded best paper presentation in 10th JK Science Congress for Mathematical Sciences Section, held in University of Jammu, February 20-22, 2014.
30. Seminars/ Conferences/Workshops organized and the source of funding (national i. international) with details of outstanding participants, if any. (w.e.f. 1st June 2009 to 28th February 2015):

The Department organised following events during 1.6.2009 to 28.02.2015:

1. ISPS International Conference on Development and Applications of Statistics in Emerging Areas of Science and Technology , Dec.8-10, 2010.

Sponsors: DST, Govt of India, MOSPI, Govt.of India, NBHM, Govt.of India.

Outstandng Participants: Prof Bimal Roy, Director, ISI, Kolkatta,
 Prof Hira Lal Koul, Michigan State University, USA,
 Prof Sat Gupta, NC University, USA,
 Prof Ratnaparkhi, USA,
 Prof Alex D Leon, NCU, USA.
 Prof Asish Sengupta, ISI, Kolkatta.

2. National Workshop “Modern Tools in Applied Statistics” Dec. 4-7, 2010.

Sponsors : DST

3. National Workshop on Research Methodology and Application of SPSS for Data Analysis for Economics and Related Disciplines for SC/ST Scholars during 18.2.2013 to 27.2.2013.

Sponsors: ICSSR, Government of India.

4. National Workshop on Survival Analysis in Clinical Research-Hands on training in SPSS on 31.10.2014.

Sponsors: DST, Government of India

ICMR, Government of India

NBHM, Government of India

5. 32nd Annual Conference of Indian Society for Medical Statistics on Recent Advances in Statistical Methods and their Applications In Health Sciences During November 1-3, 2014.

Sponsors: DST, Govt of India, ICMR, Govt.of India, NBHM, Govt. of India

Outstandng Participants: Prof S N Dwivedi, AIIMS, New Delhi
 Prof Kalpana Mahajan, Punjab University, Chandigarh

Prof R K Soni, DMC, Ludhiana

Prof Nazneen Shariff, UK

6. National Meet of Research Scholars in Mathematical Sciences, Dec 8-12, 2014.

Sponsors: SERB DIVISION,DST, Government of India.

31. Code of ethics for research followed by the departments: Nil

32. Student profile programme-wise:

Name of the Programme	Applications received	Selected		Pass percentage	
		Males	Females	Males	Females
M.Sc					
2009	314	08	26	62.5%	76.9%
2010	342	13	26	46.15%	69.23%
2011	82	05	24	80%	87.5%
2012	75	06	22	66.66%	68.18%
2013	47	01	25	100%	64%
2014	62	04	22	Appearing	Appearing
M.Phil					
2009	15	03	08	100%	100%
2010	25	Nil	04	100%	100%
2011	14	02	03	100%	100%
2012	32	01	04	100%	100%
2013	24	01	02	100%	100%
2014	32	01	02	100%	100%
Ph.D					
2009	01	01	Nil		
2010	05	03	02		
2011	14	Nil	02	—	—
2012	14	Nil	06		
2013	02	Nil	02		
2014	02	Nil	02		

33. Diversity of students (w.e.f. 1st June 2009 to 28th February 2015)

Name of the Programme	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc	100%	Nil	Nil	Nil
M.Phil	99.5%	Nil	0.5%	Nil
Ph.D	99.5%	0.5%	Nil	Nil

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. (w.e.f. 1st June 2009 to 28th February 2015)

Civil : 6

Defence : 2

NET : 2

SET : Nil

Other : 14

35. Student progression

Student progression	Percentage against enrolled
UG to PG 10%	40%
PG to M.Phil.	20%
PG to Ph.D.	8%
Ph.D. to Post-Doctoral	Nil
Employed <ul style="list-style-type: none"> Campus selection Other than campus recruitment 	Nil 50%
Entrepreneurs	Nil

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	40%
from other universities within the State	Nil
from universities from other States	60%
from universities outside the country	Nil

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period (w.e.f. 1st June 2009 to 28th February 2015): Nil

38. Present details of departmental infrastructural facilities with regard to

- a) Library: 2190 Books and 5 Journals Subscription
- b) Internet facilities for staff and students: 40 PCs with Internet Facility
- c) Total number of class rooms: 4
- d) Class rooms with ICT facility: 02
- e) Students' laboratories: 01
- f) Research laboratories: 01

39. List of doctoral, post-doctoral students and Research Associates (w.e.f. 1st June 2009 to 28th February 2015)

a) Doctoral students from the host institution/university:

- 1. Dr. Rashpal Singh
- 2. Dr. Vikas Sharma
- 3. Dr. Sandeep Singh Charak
- 4. Dr. Sumit Koul
- 5. Dr. Sandeep Kumar
- 6. Dr. Ankush Bharti
- 7. Dr. Yodh Raj
- 8. Dr. Mohinder Pal

40. Number of post graduate students getting financial assistance from the university:

Four students are getting University Merit and Merit cum means scholarship from University of Jammu

41. Was any need assessment exercise undertaken before the development of new programme(s)?
If so, highlight the methodology: Nil
42. Does the department obtain feedback from
- i. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
Nil
 - ii. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
Nil
 - iii. alumni and employers on the programmes offered and how does the department utilize the feedback?
Nil
43. List the distinguished alumni of the department (maximum 10)
1. Prof. Rahul Gupta, Head, Department of Statistics, University of Jammu
 2. Mr. Kishore Kumar, ISS, Director FCI
 3. Dr. Ajay Kumar, Joint Director, Agriculture
 4. Dr. Akanksha Aggarwal, ISS, CSO, Delhi
 5. Mr. Amit Gupta, Assistant Director, Planning Department, J&K Govt.
 6. Dr. Yodhraj, Assistant Director, Planning Department, J&K Govt.
 7. Dr. Romesh Gupta, Head, Statistics, MAM College, Jammu
 8. Dr. Surinder Kumar, Head, Statistics, Dr. B.R. Ambedkar, Central University, Lucknow
 9. Dr. Mohinder Paul, Head, Statistics, GCW College, Jammu
 10. Dr. Mohd. Anwar, Deputy Manager, RBI, Mumbai
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts. (w.e.f. 1st June 2009 to 28th February 2015): Pl. refer Q.No.30
45. List the teaching methods adopted by the faculty for different programmes.
Lectures, Seminars, Discussions, Demonstrations.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
By discussing in the Departmental Affairs Committee and Departmental Research Committee

47. Highlight the participation of students and faculty in extension activities.

(w.e.f. 1st June 2009 to 28th February 2015) : Nil

48. Give details of “beyond syllabus scholarly activities” of the department.

Regular holding of Seminars, Popular Lectures, Picnics, Excursions etc.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details : Nil

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

The Department Faculty and research scholars are actively involved in research and contributing in generating knowledge by publishing their research outputs in books and journals.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

1. Dedicated teaching.
2. Healthy relationship with students.
3. Cohesiveness within Faculty, Staff and Students.
4. Regular organisation of Academic Activities workshops, conferences, seminars etc.
5. Good publications and availability of modern research tools in the Departmental Laboratory.

Weakness

1. Need to Strengthen technical Staff.
2. Need greater grants for Library.
3. Inadequate washrooms especially for physically disabled.

Opportunities and Challenges

1. Optimum use of library resources.
2. Inadequate use of Computational facilities.
3. Improvement in research outputs.
4. Publications in world's best journals of Statistics.
5. Updating syllabi as per market requirement.

52. Future plans of the department

1. To get Financial Aid under SAP
2. To organise an International Conference
3. To get placement drive conducted for the students of the Department
4. To motivate all Faculty Members to take major Research Project from UGC/DST/MOSPI etc.

Faculty of Sciences

FOREWORD FROM DEAN, FACULTY OF SCIENCES

The Faculty of Science in the University of Jammu is a vibrant, dynamic faculty comprising six departments (Chemistry, Geography, Home Science, Physics & Electronics, Geology and Remote Sensing & GIS). The disciplines are quite diverse and offer a rich opportunity to the stakeholders for multidisciplinary research perspectives in science. The teaching staff in the faculty is dynamic and hardworking too. Their efforts at generating funds from various funding agencies have led the faculty to an enviable position with respect to sanctioned projects and quality of research publications. Each department of the faculty is unique and undertakes multifarious activities in teaching, research and outreach.

The Department of Chemistry, with a present faculty strength of eleven, is equipped with a large number of scientific equipments having state recognition in terms of its scientific equipments. A 400 MHz NMR spectrometer purchased under DST-PURSE project is the star attraction of the department. The dedicated faculty of Chemistry has been instrumental in producing a substantial number of NET qualified students, besides having produced a sizable number of M.Phil. and Ph.D. students. Thirty two students are registered for Ph.D. programme of studies. Almost all the faculty members are credited with handsome research grants coming from various national funding agencies. The faculty has also filed three patents during 2014 and has made research publications in high impact factor journals of international repute.

The Department of Geology has ten faculty members. The strength of the department lies in the nature and kind of research projects being handled by its faculty in the field of Himalayan Cryosphere, Seismology, Crustal deformation and Seismotectonic analysis of various regions of J&K state. Adequate amount of funding has been generated by the department from agencies like DST, MOES, UGC etc. Publications have been mostly in various reputed national and international journals.

The Department of Geography with a moderate faculty strength of six is involved in interdisciplinary research with the Department of Remote Sensing. Their participation in the activities of other allied disciplines in terms of collaborative research projects and papers provides a good platform to researchers in the fields of Geomorphology, environmental geography, cultural Geography and Agro-Geography. Organization of seminars and participation of staff in co-curricular activities is a regular academic feature of the Department.

The Department of Home Science with faculty strength of five is working with the mission of overcoming underdevelopment and empowering individuals and families. The nature of programmes offered at post graduate level is interdisciplinary and both theoretical and applied in nature. The Department has produced sufficient number of research scholars over the last three

decades, since its inception in 1988 and many of the students enrolled have qualified national level examinations (UGC-NET/ JRF, ICAR-NET, etc.). The Department has good number of publications in referred journals. The Department is actively engaged in outreach activities with various sections of society including children, women, children & families with special needs and children in difficult circumstances. A UGC sponsored Nursery school and Day Care Centre for children of University employees and others is a central facility provided by the department of Home Science.

Originally the Department of Physics, it today offers M.Sc. programme in Physics as well as the Electronics. M.Phil. and Ph.D. programmes are conducted by the Department in both the disciplines. The Department has produced a large number of M.Phils. (69) and Ph.Ds. (27) during the period under report. The strength of the department is the magnitude of funding it has received from agencies like DST, DRDO, ICMR, CSIR, DAE, AICTE, UGC, DOE, etc. Participation of the department in international collaboration research projects at Geneva, Germany and USA and national collaborations with various national laboratories and universities is the key feature of this department. It is funded under DRS-SAP, DST-FIST, DST-PURSE and also through individual centric mega research projects. The Department is credited with DST-XRD computer-controlled single crystal Xray diffractometer with CCD camera as a National Facility at Jammu University. Recently, the Department has purchased powder X-ray diffractometer and a Cryojet system under PURSE programme. The Department has organised ten national/international seminars, besides the teaching staff having undertaken foreign visits under sponsored/ collaborative programmes. The faculty has received many national/international recognitions in the form of awards & fellowships.

The Department of Remote Sensing and GIS, established recently in 2008, has departmental projects funded by DST-FIST, DPE, DBT, ICSSR etc. Its special research laboratory has been sponsored by Deptt. of Space, GOI & ISRO, Bangalore. A large number of its students (31 in number) have done inter-department projects while 11 students are doing projects in collaboration with other universities/industry. The department organised 21 days Winter school training programme for capacity building in Geospatial Technologies under NRDMS (DST) Programme in Feb-March'2014. RS&GIS techniques find useful applications in different fields such as assessment of geobiological hazards, minerals and oil exploration, tourism, transport and navigation systems etc.

The above description of various departmental activities reveals the faculty to be lively and truly academic and research oriented. It is envisioned to make the science departments under the Faculty of Science consolidate their existing disciplines for the benefits of stakeholders and expand, including addition of new value added courses (like the one (M.Sc. (Tech) Applied Geology) introduced by Department of Geology) with the objective of making courses job oriented. The faculty also plans to obtain more funding from both national and international sources, increased collaborations with industry and civil society for improvement of the life conditions in the world. Besides increased research and outreach activities, it is the vision of the science faculty to enhance the beauty of individual science disciplines and to create enthusiasm for teaching and learning of each subject.

EVALUATIVE REPORT OF THE DEPARTMENT

1. Name of the Department : Department of Chemistry
2. Year of establishment : 1962
3. Is the Department part of a School/Faculty of the university?
Faculty of Sciences
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)
 - M.Sc.
 - M.Phil.
 - Ph.D.
5. Interdisciplinary programmes and departments involved
The Department is involved in interdisciplinary programmes through Choice Based Credit System (CBCS) and offering two courses in Post Graduation, i.e. Course No. PSCHTO304 titled “Environmental Chemistry” in M.Sc. 3rd Semester and Course No. PSCHTO410 titled “Instrumentation and Analytical Methods” in M.Sc. 4th Semester.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
Nil
7. Details of programmes discontinued, if any, with reasons
Nil
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System
Choice Based Credit System
9. Participation of the department in the courses offered by other departments
Prof. Kamal K. Kapoor and Prof. Satya Paul from Department of Chemistry are involved in teaching Bio-molecules which include chemical bonding, structure including stereochemistry, spectroscopy and spectrometry etc. and other related papers in the Department of Bio-technology, University of Jammu.
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/ Asst. Professors/others)

	Sanctioned	Filled	CAS	Total
Professors	4	1	6	7
Associate Professors	5	3 (Promoted to Professor under CAS)	2	2
Assistant Professors	7	2 (2 promoted to Associate Professor & 3 to Professor under CAS)	NA	2
				11

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name of the faculty member	Qualification	Designation	Specialization	No. of Years of Experience	No. of M.Phil. students guided	No. of Ph.D. students guided
Dr. Renu Sachar	M.Sc, Ph.D	Professor	Coordination Chemistry	33 years	02	04
Dr. Meena Sharma	M.Sc., M.Phil., Ph.D	Professor	Membrane Science/Materials Science	24 years	07	03
Dr. Sushil K. Pandey	M.Sc., Ph.D.	Professor & HOD	Dithiophosphate Chemistry, Heterometallocyclophosphazene Chemistry, Fluorine Chemistry pertaining to the synthesis CFC's alternatives and electrochemical fluorination, Metallo-organic Chemistry	20 years	07	06
Dr. Rajinder K. Bamezai	M.Sc., M.Phil., Ph.D	Professor	Liquid Crystals and Chemistry of Solutions	21 years	08	05
Dr. Kamal K. Kapoor	M.Sc., M.Phil., Ph.D	Professor	Organocyclic Chemistry, Syn. of Un-natural amino acids, Medicinal Chemistry	21 years	05	02
Dr. Haq Nawaz Sheikh	M.Sc., Ph.D	Professor	Coordination Chemistry, Nanotechnology, Environmental Chemistry	18 years	06	04
Dr. Satya Paul	M.Sc., M.Phil., Ph.D	Professor	Heterogeneous Catalysis, Green Chemistry, Solvent-free Organic Synthesis using supported reagents, Synthesis of bio-active heterocycles	16 years	10	07
Dr. Gauri D. Bajju	M.Sc., M.Phil., Ph.D	Associate Professor	Coordination Chemistry of Transition Elements, Organometallic Chemistry, Metallophorphyrins	21 years	07	02

Dr. D.S. Sambyal	M.Sc., M.Phil., Ph.D	Associate Professor	Solid State and Materials Science	16 years	05	02
Dr. Monika Gupta	M.Sc., Ph.D, NET	Assistant Professor	Green Chemistry, Synthesis of bio-active heterocycles, Ionic Liquids	05 years	03	01
Mr. Ashwani Kumar	M.Sc, NET	Assistant Professor	Physical Chemistry	05 years	-	-

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors: Nil

13. Percentage of classes taken by temporary faculty – programme-wise information

At present, no temporary faculty has been engaged.

14. Programme-wise Student Teacher Ratio

Programme		Student Teacher Ratio
M.Sc.		9:1
M.Phil.	(2014 -15)	3:8
	(2015 -16)	1:3
Ph.D.		6:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Post	Sanctioned	Filled	Actual
Academic support staff (technical)	06	05	05
Administrative staff	06	05	05

16. Research thrust areas as recognized by major funding agencies

The thrust areas recognized under Special Assistance Programme (SAP) - Materials and Membrane Science.

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. (w.e.f. 1st June 2009 to 28th February 2015)

a) National funding agencies

S.N o.	Name of the Investigator	Title of the project	Amount (Rs. in lakhs) & Duration	Name of Sponsored Agency	Status
1.	Dr. K.K. Kapoor	Unnatural amino acids	18.00 (3 years)	DST, N.Delhi	Completed
2.	Dr. K.K. Kapoor	Synthesis of unnatural α -amino acids by transfer hydrogenation and building blocks for medicinal chemistry and materials science from α -nitroacetate	35.00 (3 years and 6 months)	DST, N.Delhi	Completed

		and building blocks for medicinal chemistry and materials science from α -nitroacetate	6 months)		
3.	Dr. K.K. Kapoor	Innovations in Science and Technology for inclusive development	06.50 (1 year)	NCSTC, DST, GIO, New Delhi	Completed
4.	Dr. Monika Gupta	Synthesis and applications of room-temperature ionic liquids	19.00 (3 years)	DST, N.Delhi	Completed
5.	Dr. S.K. Pandey	Synthesis and characterization of new metal complexes of ditolyldithiophosphates and their biological activity	10.20 (3 years)	UGC, N.Delhi	Completed
6.	Dr. H.N. Sheikh	Development of porous coordination polymers	48.40 (3 years)	DRDO, N.Delhi	Completed
7.	Dr. R.K. Bamezai	Preparation and thermal characterization of novel hydrogen bonded mesogens in cooperating non-mesogens through selective recognition	10.16 (3 years)	UGC, N.Delhi	Completed
8.	Dr. Satya Paul	Development of sulfonic acids from renewable resources as heterogeneous acid catalysts in organic synthesis	11.15 (3 years)	UGC, N.Delhi	Ongoing
9.	Dr. D.S. Sambyal	Investigation of the structural, electrical and magnetic properties of perovskite oxides	9.65 (3 years)	UGC, N.Delhi	Ongoing
10.	Dr. G.D. Bajju	Stereochemistry around group 13 metals in macrocyclic complexes containing auxiliary ligands	14.06 (3 years)	UGC, N.Delhi	Ongoing
11.	Dr. K.K. Kapoor	Unprecedented cascade reactions between ninhydrin and active methylenes: Synthesis of novel and structurally challenging propellanooids, liniearly- and spiro-fused heterocycles	15.58 (3 years)	UGC, N.Delhi	Ongoing

b) International Funding Agencies

Nil

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration

(i) The Department of Chemistry, University of Jammu has MOU on research activities with IIIM, Jammu.

b) International collaboration

(i) Prof. S.K. Pandey has academic collaboration with Prof. D. Stalke, Institute of Inorganic Chemistry, University of Gottingen, Gottingen, Germany.

(ii) Prof. Satya Paul has academic collaboration with James H. Clerk, Green Chemistry

Centre of Excellence, University of York, UK.

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. (w.e.f. 1st June 2009 to 28th February 2015)

- DST-FIST 2010, Grant received Rs. 44.5 lakhs
- UGC-SAP 2010, Grant received Rs. 20 lakhs
- DRS-SAP 2010, Grant received Rs. 45 lakhs
- DST-PURSE 2011, Grant received Rs. 155 lakhs

20. Research facility / centre with

a. state recognition

400 MHz NMR Spectrometer, Thermal Analyzer, CHNS Analyzer, FTIR, UV-Visible Spectrophotometer, Faraday Magnetic System, Cryogenic System for measurement of Superconductivity, Atomic Absorption Spectrophotometer, Mettler Hotstage Microscope, Microwave Synthesizer, Cyclic Voltameter, Flash Chromatography, Ion Chromatograph, Magnetic Susceptibility Balance, Interferometer, Digital Density Meter etc.

b. national recognition

- 400 MHz NMR Spectrometer

c. international recognition

Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies

FIST supported instrumental laboratory has been set up and various major equipments such as UV-Vis Spectrometer, Cyclic Voltameter, Micro-Synthesizer, have been installed in this laboratory.

22. Publications: (w.e.f. 1st June 2009 to 28th February 2015)

- Number of papers published in peer reviewed journals (national/international)
- 239

S.No.	Journal/Papers Name	Title of the Paper	Year in which published	Author(s)	Journal / Journal Pages
1.	<i>J. Braz. Chem. Soc.</i>	Silica functionalized sulfonic acid catalyzed one-pot synthesis of 4,5,8a-triarylhexahydropyrimido[4,5-a]pyrimidine-2,7(1H3H)-diones under liquid phase catalysis	2010	Princy Gupta, Vineet Kumar and Satya Paul	21 , 349-354
2.	<i>Catal. Letter.</i>	Silica functionalized Cu(I) as a green and recyclable heterogeneous catalysts for the Huisgen 1,3-dipolar cycloaddition in water at room temperature	2010	Tahira Shamim and Satya Paul	136 , 260-265
3.	<i>Catal. Letter.</i>	Nano sized Mn(acac) ₃ anchored on amino functionalized silica for the selective oxidative synthesis of 2-arylbenzimidazoles, 2-arylbenzothiazoles and aerobic oxidation of benzoin in water	2010	Ravinder Pal Kour Sodhi and Satya Paul	136 , 262-265
4.	<i>J. Coord. Chem.</i>	Dinuclear peroxo complexes of molybdenum(VI) containing Mannich base ligands	2010	Rimpy Gupta, Haq Nawaz Sheikh , Mohita Sharma and Bansi Lal Kalsotra	63 , 3256-3267
5.	<i>E-Journal of Chem.</i>	Preparation and characterization of cyano complexes of oxotungsten(IV) with Mannich base ligands	2010	Mohita Sharma, Mohd. Saleem, Balgar Singh, H.N. Sheikh and B. L. Kalsotra	7(S1) , S231-S238
6.	<i>J. Indian Chem. Soc.</i>	Cyano complexes of oxotungsten(IV) with aroyl hydrazone ligands	2010	Mohd. Saleem, Mohita Sharma, Simpy Mahajan, H.N. Sheikh and B. L. Kalsotra	89 , 1385-1389
7.	<i>Inorg. Chem.</i>	New chelating ligands based on S-organosulfurdiimides: Synthesis and single crystal X-ray structures	2010	J. T. Enno Meyer, T. Schulz, S. K. Pandey and D. Stalke	49(6) , 2743
8.	<i>Chem Commun.</i>	The first asymmetric organolithium tetramers with simple ether donor bases	2010	T. Talic, K. Meindl, S.K. Pandey and D. Stalke	46 , 4562
9.	<i>Dalton Trans.</i>	Stephan M. Deuerlein and Deitmar Stalke, Access to new Janus head ligands: lonking sulfur diimides and phosphanes for hemilabile tripodal scorpionates	2010	Marget M. Meinholz, Sushil K. Pandey	DOI: 10.1039/C0DT00665C(2010)
10.	<i>Ind. J. Chem. Sec. B</i>	One-pot synthesis of antifungal active of 9-sub-3-aryl-5H,13aH-[1,2,4]triazolo[4,3-b][1,2,4]triazepines using solid support	2010	Monika Gupta , Satya Paul and Rajive Gupta	47B , 475-481
11.	<i>Open Catalysis Journal</i>	Zinc catalyzed Claisen rearrangement of allyl aryl ethers to o-allylated phenols	2010	Monika Gupta	3 , 46-49
12.	<i>Open Catalysis Journal</i>	A simple and efficient oxidant Pd(OAc) ₂ causes selective oxidation of benzyl/alkyl alcohols in novel room-temperature ionic liquid (RTIL)	2010	Medha Anand, Monika Gupta , Aruna Gupta, Rajive Gupta	3 , 92-97
13.	<i>Current Science</i>	General aspects of 12 basic principles of Green chemistry along with applications	2010	Monika Gupta , Satya Paul, Rajive Gupta	99 , 1341-1366
14.	<i>Res. J. Chem. Environ.</i>	Comparative study of free volume and permeability coefficient of aqueous solutions of NaCl and NaC ₁₂ H ₂₅ SO ₄ across Nylon™ Biobond Membrane	2010	Amit Kumar Sharma and Meena Sharma	14(1) , 75-80
15.	<i>Ind. J. Chem.</i>	Synthesis and biological screening of 7-alkyl-3,3a,4,5-tetrahydroisoxazolo[3,4-d]pyridazines and 3-chloromethyl-7-methyl-3,3a-dihydro-3H-isoxazolo[3,4-d][1,2]oxazine	2010	T. Naqvi, K. K. Kapoor and R. L. Sharma	49B , 1282-1289
16.	<i>J. Chemical Sciences</i>	Synthesis and characterization of ruddlesden-popper(RP) type phase LaSr ₂ MnCrO ₇	2010	Devinder Singh and Rajinder Singh	122 , 807-811
17.	<i>Inorg. Chem.</i>	New chelating ligands based on S-organosulfurdiimides: Synthesis and single crystal X-ray structures	2010	J. T. Enno Meyer, T. Schulz, S. K. Pandey and D. Stalke	49(6) , 2743
18.	<i>Commun.</i>	The first asymmetric organolithium tetramers with simple ether donor bases, Chem.	2010	T. Tatic, K. Meindl, S. K. Pandey , and D. Stalke	46 , 4562 (2010)

19.	<i>Oxidation Communication</i>	NaBr/H ₂ O ₂ as an efficient oxidant for the oxidation of 5-aryl-3-mercapto-1,2,4-triazoles in water at room-temperature	2011	Revika Arora, Monika Gupta, Satya Paul and Rajive Gupta	34(3) , 521-525
20.	<i>European J. Med. Chem.</i>	Efficient and Novel One-Pot Synthesis of 1-Substituted-8-aryl-3-alkyl/aryl-4H-pyrazolo [4,5-f][1,2,4]triazolo[4,3-b][1,2,4]triazepines using Solid Support	2011	Monika Gupta , Satya Paul, Rajive Gupta	46(2) , 631-635
21.	<i>Bio-Organic and Medicinal Chemistry Letter</i>	Synthesis of antifungal active 9-substituted-3-aryl-5H,13aH-quinolino[3,2-f][1,2,4]triazolo [4,3-b][1,2,4]triazepines using ionic liquids	2011	Monika Gupta	21 , 4919-4923
22.	<i>Journal of pharmaceutical and biomedical Sciences</i>	A simple and efficient comparative procedure for synthesis of 8-methyl-3,6,8-triaryl-7H, 9H-[1,2,4]triazolo[4,3-b][1,2,4]triazepines	2011	Monika Gupta	5(19) , 1-5
23.	<i>Oxidation Communication</i>	An efficient oxidant FeCl ₃ in presence of molecular oxygen catalyzed selective oxidation of benzyl/alkyl alcohols using recyclable room-temperature ionic liquid	2011	Monika Gupta , Satya Paul, Rajive Gupta	34(4) , 922-931
24.	<i>Dalton Trans.</i>	Access to new Janus head ligands: linking sulfur diimides and phosphanes for hemilabile tripodal scorpionates	2011	Margret M. Meinholz, Sushil K. Pandey , Stephan M. Deuerlein and Dietmar Stalke	40 , 1662 (2011)
25.	<i>Bulletin of Materials Science</i>	Synthesis and characterization of composites of mixed oxides of iron and neodymium in a polymer matrix of aniline- formaldehyde	2011	Sajidha, H. N. Sheikh , B. L. Kalsotra, N. Kumar and S. Kumar	34(4) , 843-851
26.	<i>J. Indian Chem. Soc.</i>	Mixed ligand complexes of molybdenum(0) and tungsten(0) containing mannich bases and carbonyl as ligands	2011	Mohita Sharma, Mohd Saleem, Balgar Singh, H. N. Sheikh and B. L. Kalsotra	88 , 1653-1659
27.	<i>Chin. J. Chem.</i>	Diperoxo Complexes of Vanadium(V) Containing Mannich Base Ligands	2011	Simpy Mahajan, Balgar Singh, Mohita Sharma, H. N. Sheikh , B. L. Kalsotra	29(1) , 53-58
28.	<i>Journal of Indian Chemical Society</i>	Thermoacoustic properties of lysine hydrochloride in aqueous and in mixed aqueous Solutions	2011	Anjana and R. K. Bamezai	88(4) , 521-524
29.	<i>Journal of Chemical Crystallography</i>	Synthesis and crystal structure of (2S, 6R) Ethyl 1, 2, 6 - triphenyl – 4 – (phenylamino) – 1, 2, 5, 6 – tetrahydropyridine – 3 – carboxylate	2011	Ambika Sambyal, R. K. Bamezai , T. K. Razdan and Vivek K Gupta	41(6) , 868-873
30.	<i>Indian Journal of Chemistry</i>	Dielectric measurements of nematic and smectic A phases in a binary system	2011	R. K. Bamezai , Meena Sharma, Monika Gupta, Ankush Gupta and Arti Soni	50(A) , 680-684
31.	<i>Archives of Applied Science Research</i>	Ultrasonic and volumetric investigations of L-threonine in aqueous and in mixed aqueous solutions	2011	Anjana and R. K. Bamezai	3(1) , 370-379
32.	<i>Journal of Chemical and Pharmaceutical Research</i>	Synthesis and Characterization of Layered Perovskite-Oxide Ceramic La _{0.5} Sr _{1.5} Ti _{0.5} Fe _{0.5} O ₄	2011	D. Singh and R. Singh	3 , 957-963
33.	<i>Bulletin of Korean Chemical Society</i>	Synthesis and Characterization of Intergrowth Type Perovskite Oxide NdSr ₂ MnCrO ₇	2011	D. Singh	32 , 2761-64
34.	<i>Journal of Korean Chemical Society</i>	Investigation on the Structural, Electrical and Magnetic Properties of Layered Perovskite Manganite La _{0.5} Sr _{1.5} Mn _{0.5} Cr _{0.5-x} Fe _x O _{4-δ} (x= 0.15, 0.3) System	2011	D. Singh	55 , 697-702
35.	<i>Bulletin of Materials Science</i>	Synthesis, Structure and Low temperature Study of Electric Transport and Magnetic Properties of GdSr ₂ MnCrO ₇	2011	D. Singh* , M. Sharma, S. Sharma and R. Singh	34 , 1089-1093
36.	<i>J. Heterocyclic Chem.</i>	Synthesis and biological screening of 4-(3,3-dimethylspiro{bicyclo[2.2.1]heptan-2,5O-isoxazoline-2}-3O-yl)-2-aryl-2,3-dihydro-1H-1,5-benzodiazepines	2011	Tahira Naqvi, Deepali Mahajan, Rattan Lal Sharma, Inshad Ali Khan and Kamal K. Kapoor	48 , 144-148

37.	<i>Asian Journal of Chemical and Environmental Research</i>	Stereochemistry around chromium(III) in mixed ligand complexes	2011	Gauri D. Bajju , Deepmala, Ashu and Sujata Kundan	4 (03)
38.	<i>Journal of Indian Chemical Society</i>	Synthesis and Characterization of axially ligated Zinc(II)-p-nitro-meso-tetraphenylporphyrin	2011	Gauri D. Bajju , Sujata Kundan and Sunil Kumar Anand	88, 1-10
39.	<i>X-ray Structure Analysis Online</i>	Synthesis and Crystal Structure of Bis(O-ethylthiocarbonato)bis(4-ethylpyridine)nickel(II)	2012	Kuldeep Singh, Inderjeet Kour, Gurpreet Kour, Renu Sachar , Vivek K. Gupta, and Rajnikant	28(9), 69
40.	<i>X-ray Structure Analysis Online.</i>	Crystal Structure of Bis(O-n-butylthiocarbonato-S,S')(1,10-phenanthroline)-manganese(II)	2012	Gurvinder Kour, Akshit Kumar, Inderjeet Kour, Gurpreet Kour, Renu Sachar , Vivek K. Gupta and Rajnikant	28(12), 85
41.	<i>Journal of Chemical Crystallography</i>	Synthesis and Characterization of the Adducts of Bis(O-amyldithiocarbonato)nickel(II) with Nitrogen Donors and X-ray Structure of Bis(O-amyldithiocarbonato)bis(3,5-dimethylpyridine)nickel(II)	2012	Kuldeep Singh, Neerupama, Inderjeet Kour, Renu Sachar , Vivek K. Gupta, Verma Rajnikant	42, 1176-1181
42.	<i>J.Chem. Crystallogr.</i>	Synthesis and Characterization of the Adducts of Bis(O-butylthiocarbonato)nickel(II) with substituted Heterocyclic Amines and X-ray Structure of Bis(O-butylthiocarbonato)bis(4-cyanopyridine)nickel(II)	2012	Sanjay Kapoor, Renu Sachar , Kuldeep Singh, Vivek K. Gupta, Verma Rajnikant	42, 222-226
43.	<i>J. Chem. Crystallogr.</i>	Synthesis, Characterization and X-ray Structure of Bis(O-Propylthiocarbonato- η^2 S,S')bis(4-cyanopyridine- η^2 N)nickel(II)	2012	Sanjay Kapoor, Renu Sachar , Kuldeep Singh, Vivek Gupta, Rajnikant	42, 458-463
44.	<i>Acta. Cryst.</i>	Bis(O-ethylthiocarbonato- η^2 S,S')bis(Pyridine-3-carbonitrile- η^2 N)nickel(II)	2012	Sanjay Kapoor, Ramandeep Kour, Renu Sachar , Rajni Kant, Vivek K. Gupta and Kamini Kapoor	E 68, m58
45.	<i>X-ray Structure Analysis online The Japan Society for Analytical Chemistry</i>	Crystal Structure of Bis(O-Propylthiocarbonato- η^2 S,S')(2,2'-bipyridine- η^2 N,N')nickel (II)	2012	Sanjay Kapoor, Renu Sachar , Vivek K. Gupta and Rajni Kant	28, 43
46.	<i>E- Journal of Chemistry</i>	Synthesis and Characterization of the Adducts of Morpholinedithiocarbamate complexes of oxovanadium(IV), Nickel(II), copper(II) with piperidine and morpholine	2012	Renu Sachar	9, 1929-1940
47.	<i>Oriental Journal of Chemistry</i>	Synthesis and Characterization of Zirconium(IV) derivatives of Meso-tetra(p-methylphenyl)porphyrins with Acetylacetonate and different Phenolates at Axial positions	2012	Gauri D. Bajju , Sunil Kumar Anand, Sujata Kundan, Deepmala, Ashu and Gita	28(01), 417-432
48.	<i>Oriental Journal of Chemistry</i>	Synthesis and Spectroscopic Studies of Zirconium(IV) Porphyrins with Acetylacetonate and Phenolates at Axial positions	2012	Gauri D. Bajju , Sunil Kumar Anand and Sujata Kundan	28(01), 449-462
49.	<i>International journal of Science and Nature</i>	Polymeric complexes of Embelin with some Metal ions	2012	Onkar Singh, Karan Singh, Gauri D. Bajju	3 (3), 646-650
50.	<i>Green Chem.</i>	A comparative study of different metal acetylacetonates covalently anchored onto amine functionalized silica: a study of the oxidation of aldehydes and alcohols to corresponding acids in water	2012	Ravinderpal Kour Sodhi, Satya Paul and J. H. Clark	14, 1649-1656
51.	<i>J. Mol. Catal. A: Chem.</i>	Sulfonated carbon/silica composite functionalized Lewis acids for one-pot synthesis of 1,2,4,5-tetrasubstituted imidazoles, 3,4-dihydropyrimidin-2(1H)-ones and for Michael addition of indole to α,β -unsaturated ketones	2012	Princy Gupta and Satya Paul	352, 75-80
52.	<i>Acta Cryst.</i>	4-Bromobenzoic acid-6-(4-bromophenyl)-3-methyl-1,2,4-triazolo[3,4-b][1,3,4] thiadiazole (1/1)	2012	Kamni Kapoor, Vivek K. Gupta, Satya Paul , Seema Sahi and Rajnikant	E68, o1185-1186
53.	<i>Oxidation Communication</i>	Basic alumina/ KOH catalyzed one-pot synthesis of 3,4-dihydropyrimidinones/thiones in liquid phase	2012	Monika Gupta	35, No.4, 1049-1055
54.	<i>Monateshefte Fur Chemie-Chemical Monthly</i>	Synthesis, characterization and biocidal aspects of O,O'-ditolyl/dibenzyl dithiophosphates of lanthanum, (III) and their adducts with nitrogen and phosphorus donor bases	2012	A. Syed and S. K. Pandey	143(V), 1087
55.	<i>Int. J. Chem.</i>	O,O'-Ditolyl/dibenzyl dithiophosphates of alkaline earth metals and their biological activity	2012	D. Kumar, B. Gupta and S. K. Pandey	1, 247

56.	<i>Monateshefte Fur Chemie-Chemical Monthly</i>	O-Tolyl/benzyl dithiocarbonates of phosphorus(III) and (V): syntheses and characterization	2012	B. Gupta, N. Kalgotra, S. Andotra and S.K. Pandey	143 , 1087
57.	<i>J. Am. Chem. Soc.</i>	Aggregation of Donor Base Stabilized 2-Thienyllithium in a Single Crystal and in Solution: Distances from X-ray Diffraction and the Nuclear Overhauser Effect	2012	M. Granitzka, Ann-Christin Pöppler, E. K. Schwarze, D. Stern, T. Schulz, M. John, R. Herbst-Irmer, S. K. Pandey and D. Stalke	134 , 1344
58.	<i>J. Chem. Crystallogr.</i>	Convenient route to alkylene dithiophosphato ligands: Synthesis and Crystallographic Analysis of [OCH ₂ CMe ₂ CH ₂ OPS ₂ HNEt ₃]	2012	A. Kumar, Dinesh, S. Kour, M. S. Hundal and S. K. Pandey	42 , 299
59.	<i>Phosph. Sulfur and Silicon and the Related Elements</i>	O-Tolyldithiocarbonate complexes of iron(II) and iron(III)	2012	N. Kalgotra, B. Gupta, K. Kumar and S. K. Pandey	187 , 364–375
60.	<i>Acta Cryst.</i>	Hydrothermal synthesis and crystal structure of novel bis(6-carboxypyridine-2- carboxylato-k ³ O ² ,N,O ⁶)nickel(II) trihydrate [Ni(Hpydc) ₂] _n .3nH ₂ O	2012	Sumit Sanotra, Rimp Gupta, Haq Nawaz Sheikh , Bansi Lal Kalsotra, Vivek Kumar Gupta and Rajnikant	B68(6) , 619-624
61.	<i>J. Coord. Chem.</i>	Sonochemical synthesis and characterization of novel nanorod diaqua(pyridine-2,6-dicarboxylato)copper(II) 3-D supramolecular network: new precursor to prepare pure phase nanosized copper(II) oxide	2012	Rimp Gupta, Sumit Sanotra, H. N. Sheikh , B.L. Kalsotra, Vivek K. Gupta and Rajnikant	65 , 3917-3931
62.	<i>Synth. React. Inorg. Metal-Org. & Nano-Metal Chem.</i>	Synthesis and Characterization of Nanocomposites of mixed Oxides of Iron and Cerium in a Polymer Matrix	2012	Sajdha, H. N. Sheikh and B. L. Kalsotra	42(6) , 892-901
63.	<i>Monatshefte für Chemie - Chemical Monthly</i>	Synthesis and Characterization of Peroxo Complexes of Uranium(VI) with some Mannich base Ligands	2012	B. Singh, S. Mahajan, M. Sharma, H.N. Sheikh , B.L. Kalsotra	143(1) , 91-99
64.	<i>Russian J. Inorg. Chem.</i>	Peroxo complexes of uranium(VI) containing nitrogen and oxygen donor ligands	2012	B. Singh, S. Mahajan, Mohita Sharma, H.N. Sheikh , B.L. Kalsotra	57(8) , 1079-1088
65.	<i>J. Indian Chem. Soc.</i>	Peroxo complexes of uranium(VI) with N-benzoyl urea and related ligands : Synthesis, characterization and antifungal activity	2012	Balgar Singh, Simpy Mahajan, Haq N. Sheikh and Bansi L. Kalsotra	89(9) , 1265-1271
66.	<i>E-Journal of Chem.</i>	Synthesis and characterization of Group-6 metal carbonyl complexes of Aroyl hydrazone derivatives	2012	Mohd Saleem, Mohita Sharma, Simpy Mahajan, H. N. Sheikh and B. L. Kalsotra	9(2) , 807-817
67.	<i>Chem. Sci. Trans.</i>	Peroxo Complexes of Vanadium(V) Containing Aroylhydrazone Ligands	2012	B. Singh, S. Mahajan, M. Sharma, H.N. Sheikh , B.L. Kalsotra	1(1) , 23- 34
68.	<i>Acta Cryst. Section E</i>	3-(4-(Chloroanilino)-5,5-dimethylcyclohex-2-en-1-one	2012	Sumati Anthal, Ambika Sambyal, R. K. Bamezai , Rajni Kant and Vivek K Gupta	E68 , o1063
69.	<i>Acta Cryst. Section E</i>	(E)-4-(4-Methoxyphenyl)but-3-en-2-one	2012	Ambika Sambyal, Manpreet Kour, Sumati Anthal, R. K. Bamezai , Rajni Kant and Vivek K Gupta	E68 , 1183
70.	<i>Proceedings of the National Academy of Sciences, India, Section A: Physical Sciences</i>	Dielectric Studies of 4-[4-(n-decyloxy)benzylideneamino]benzonitrile	2012	R. K. Bamezai , Arti Soni and Aradhana Anand	82(2) , 143-146
71.	<i>Archives of Applied Science Research</i>	Volumetric Analysis of L-arginine hydrochloride in aqueous tetrahydrofuran at 303.15K	2012	Balwinder Saini, Bindu Rani and R.K.Bamezai	4 , 2068-2076
72.	<i>Journal of Electronic Materials</i>	Study of Structural, Electrical, and Magnetic Properties Layered Perovskite Oxides LnSr ₂ TiFeO ₇ (Ln=Nd, Gd)	2012	D. Singh and R. Singh	41 , 540-545
73.	<i>Indian Journal of Engineering and Materials Science</i>	Investigation on the Structural, Electrical and Magnetic Properties of Layered Perovskite Manganite DySr ₂ MnCrO ₇ ,	2012	D. Singh , M. Sharma, R. Singh and S. Sharma	19 , 199-203
74.	<i>Ionics</i>	Synthesis and Characterization of Layered Perovskite Oxides (La, Sr) _{n+1} (Ti, Cr) _n O _{3n+1} (n=1, 2)	2012	D. Singh , S. Sharma, A. Mahajan, S. Singh and R. Singh	DOI 10.1007/s11581-012-0772-2

75.	<i>Ionic</i>	Synthesis and Characterization of Layered Perovskite Oxides $\text{La}_{1-x}\text{Sr}_x\text{MnCrO}_7$ ($x=0.2, 0.5$)	2012	D. Singh , R. Singh, S. Sharma and M. Sharma	DOI 10.1007/s11581-012-0752-6
76.	<i>Tetrahedron Letters</i>	Synthesis of novel 2,2-disubstituted naphthodioxoles via an unprecedented reaction	2012	Satish Kumar, Pallvi, Shally Chadha, Sumita Dham, Tanya Hundal and Kamal K. Kapoor	53 , 1905-1907
77.	<i>Journal of Industrial and Engineering Chemistry</i>	Heteropolyacid-Clay nano composite as a novel heterogeneous catalyst for the synthesis 2,3-dihydroquinazolinones	2012	Bashir A. Dar, Akshya K. Sahu, Praveen Patidar, P. R. Sharma, Nagaraju Mupparapu, Dushyant Vyas, Sudip Maity, Meena Sharma and Baldev Singh	19(2) , 407-412
78.	<i>Bulletin of Chemical Reaction Engineering and Catalysis</i>	Ceria-Based Mixed Oxide Supported Nano-Gold as an Efficient and Durable Heterogeneous Catalyst for Oxidative Dehydrogenation of Amines to Imines Using Molecular Oxygen	2012	Bashir Ahmad Dar, Meena Sharma and Baldev Singh	7 (1) , 79-84
79.	<i>Tetrahedron Letters</i>	Catalyst and solvent free, ultrasound promoted rapid protocol for the one-pot synthesis of α -aminophosphonates at room temperature	2012	Bashir A. Dar, Amrinder Singh, Akshya K. Sahu, Praveen Patidar, Meena Sharma and Baldev Singh	53 , 5497-5502
80.	<i>X-ray Structure Analysis Online</i>	Synthesis and X-ray Crystal Structure of Bis(O-propylxanthato)-bis(3-chloropyridine)nickel(II)	2013	Kuldeep Singh, Inderjeet Kour, Gurpreet Kour, Renu Sachar , Vivek K. Gupta and Rajnikant	29 , 15
81.	<i>International Journal of Inorganic Chemistry</i>	Synthesis and Characterization of the Adducts of Bis(O-ethylthiocarbonato)copper(II) with Substituted Pyridines	2013	Gurpreet Kour, Inderjeet kour and Renu Sachar	Article ID502856
82.	<i>Acta Chim. Slov.</i>	Synthesis, Characterization and X-ray Structure of the Adducts of Bis(O-butylthiocarbonato)nickel(II) with Substituted Pyridines	2013	Neerupama, Renu Sachar , Neha Sambyal, Kamini Kapoor, Kuldeep Singh, Vivek K. Gupta and Rajnikant	60 (2) , 397-402
83.	<i>X-ray Structure Analysis online</i>	Crystal Structure of Bis(O-propylthiocarbonato- $\kappa^2\text{S,S'}$)(3,5-lutidine- κN)nickel(II)	2013	Neerupama Sharma, Kuldeep Singh, Renu Sachar , Vivek Kumar Gupta, and Rajnikant	29(5) , 19
84.	<i>Chemical Science Transaction</i>	Preparation and characterization of the adducts of bis (N,N-diethylthiocarbamato)oxovanadium (IV) and copper(II) with n-propylamine and isopropylamine	2013	Renu Sachar and Mousami Sharma	2 , 367-74
85.	<i>Acta Chim. Slov.</i>	Synthesis, Characterization and X-ray Structure of the Adducts of Bis(O-butylthiocarbonato)nickel(II) with Substituted Pyridines	2013	Inderjeet Kour, Gurvinder Kour, Kuldeep Singh, Renu Sachar , Vivek K. Gupta, Rajnikant	60 (2) , 397-402
86.	<i>International Journal of Inorganic Chemistry</i>	Synthesis, Spectral, Thermal, Electrochemical, and Biocidal Activity of Toly/ Benzyl Dithiocarbonates of Zinc(II)	2013	Nidhi Kalgotra, Bhawana Gupta, Savit Andotra, Sandeep Kumar, and Sushil K Pandey	1-12 Article ID 135496
87.	<i>J. Bioinorganic Chemistry and Applications</i>	Spectroscopic, Thermal, Electrochemical, and Antimicrobial Studies of Mononuclear Manganese(II) Ditolylthiophosphates	2013	Ruchi Khajuria, Atiya Syed, Sandeep Ku Sushil K Pandey	1-13 Article ID 261731
88.	<i>Monateshefte Fur Chemie-Chemical Monthly</i>	Syntheses, characterization, and biocidal aspects of O,O'-ditolyl/dibenzylthiophosphates of lanthanum(III) and their adducts with nitrogen and phosphorus donor bases	2013	Atiya Syed and Sushil K Pandey	144 , 1129
89.	<i>J. Saudi Chem. Soc.</i>	Synthesis and Characterization of Isothiocyanato Complexes of Dioxotungsten(VI) with Mannich Base Ligands: Precursors for the Preparation of Pure Phase Nanosized Tungsten(VI) trioxide	2013	Rimpy Gupta, Haq Nawaz Sheikh , Bansi Lal Kalsotra and Vishal Singh	DOI: 10.1016/j.jscs.2013.02.009
90.	<i>J. Inorg. Organomet. Polym.</i>	Hydrothermal synthesis, crystal structure and characterization of new coordination polymer $[\text{Co}(\text{pydc})(\text{H}_2\text{O})] \cdot 2\text{H}_2\text{O}$	2013	Sumit Sanotra, Rimpy Gupta, Sonika Khajuria, Haq Nawaz Sheikh , and Bansi Lal Kalsotra	23(4) , 897-906
91.	<i>J. Nanostr. Chem.</i>	Room temperature aqueous phase synthesis and characterization of novel nano-sized coordination polymers composed of copper(II), nickel(II) and zinc(II) metal ions with p-phenylenediamine (PPD) as the bridging ligand	2013	Rimpy Gupta, Sumit Sanotra, Haq Nawaz Sheikh , and Bansi Lal Kalsotra	3 , 41
92.	<i>Monatshefte für Chemie - Chemical Monthly</i>	Hydrothermal synthesis and crystal structure of a supramolecular dinuclear cobalt(II) complex containing the dianion of pyridine-2,6-dicarboxylic acid	2013	Sumit Sanotra, Rimpy Gupta, Haq N. Sheikh , Bansi L. Kalsotra, Vivek K. Gupta, Rajnikant	144(12) , 1807-1813
93.	<i>Tetrahedron Lett.</i>	A simple one-pot method for the mercuric oxide mediated synthesis of piperazines via oxidative diamination of olefins	2013	Harpreet Kour, Satya Paul , Parvinder Pal Singh, Monika Gupta and Rajive Gupta	54 , 761-764
94.	<i>Synth. Commun.</i>	HAP-Pd(0): A highly efficient recyclable heterogeneous catalyst for the selective reduction of carbon-carbon double bond in α,β -unsaturated ketones	2013	Omkar Singh Chambyal, Satya Paul , Tahira Shamim, Monika Gupta, Rajive Gupta and André Loupy	43 , 656-667

95.	<i>Indian J. Chem.</i>	Synthesis and antimicrobial evaluation of novel lipophilic derivatives of pyrazolylisoxazolines	2013	Shally Chadha, Rajni Khajuria, Satya Paul and Kamal K. Kapoor	52B , 259-265
96.	<i>The Open catal. J.</i>	M(acac) _n Covalently Anchored onto Amine Functionalized Silica: Highly Efficient and Recyclable Heterogeneous Catalysts for the Acetylation of Amines, Phenols and Alcohols Under Solvent-Free Conditions	2013	Ravinderpal K. Sodhi, Vineet Kumar and Satya Paul ,	6 , 1-7
97.	<i>Ionics</i>	Synthesis and characterization of layered $(\text{Ti,Cr})_n\text{O}_{3n+1}$ (n? =? 1, 2)	2013	Sushma Sharma, Arun Mahajan, Suram Singh, Rajinder Singh and Devinder Singh	19 , 505
98.	<i>Ionics</i>	Synthesis and characterization of K ₂ NiF ₄ -type phases Ln _{0.5} Sr _{1.5} Mn _{0.5} Fe _{0.5} O ₄ (Ln? =? La, Nd, Gd, and Dy)	2013	D. Singh* , S. Sharma, A. Mahajan, S. Singh and R. Singh	19 , 1297-1302
99.	<i>Ionics</i>	Synthesis and characterization of layered perovskite-type oxides LnSr ₂ MnFeO ₇ (Ln? =? La, Nd, Gd, and Dy)	2013	D. Singh , S. Sharma, A. Mahajan, S. Singh and R. Singh	19 , 1603-1610
100.	<i>Bulletin of Korean Chemical Society</i>	Effect of partial substitution of magnetic rare earths for La on the structure, electric transport and magnetic properties of oxygen deficient phase LaSr ₂ MnCrO _{7-δ}	2013	D. Singh* , S. Sharma, A. Mahajan, S. Singh and R. Singh	34 , 1679-1683
101.	<i>Journal of Solid State Chemistry</i>	Synthesis, magnetic and electric transport properties of mixed-valence manganites La _{0.5+x} Sr _{1.5-x} Mn _{0.5} Cr _{0.5} O ₄ (x = 0.1, 0.2 and 0.3)	2013	D. Singh* and A. Mahajan	207 , 126
102.	<i>Tetrahedron Letters</i>	A solvent-free synthesis of ethyl 3,5-diaryl-1H-pyrrole-2-carboxylates via triethylphosphite mediated reductive cyclization of ethyl 2-nitro-5-oxo-3,5-diarylpentanoates under microwave irradiation	2013	Rajni Khajuria, Yeshwinder Saini and Kamal K. Kapoor	54 , 5699-5702
103.	<i>Ind. J. Chem. Section B</i>	Synthesis and antimicrobial evaluation of novel lipophilic derivatives of pyrazolylisoxazolines	2013	Shally Chadha, Rajni Khajuria, Satya Paul & Kamal K Kapoor	52B , 259-265
104.	<i>International journal of electrochemistry</i>	Electrochemical and spectroscopic characterization of aluminium(III)-para-methyl-meso-tetraphenylporphyrin complexes containing substituted salicylates as axial ligands	2013	Gauri D. Bajju , Deepmala, Sunil Kumar Anand, Sujata Kundan and Narinder Singh	Article ID 409375
105.	<i>Bioinorganic Chemistry and Applications</i>	Synthesis, Spectroscopic, and Biological Studies on New Zirconium(IV) Porphyrins with Axial Ligand	2013	Gauri D. Bajju , Gita Devi, Sapna Katoch, Madhulika Bhagat, Deepmala, Ashu, Sujata Kundan, and Sunil Kumar Anand	Article ID 903616
106.	<i>International Journal of Inorganic Chemistry</i>	Oxovanadium(IV) Complexes with Nitrogen Donors: Synthesis, Characterisation, and Biological Activities	2013	Gauri D. Bajju , Puja Sharma, Ashu Kapahi, Madhulika Bhagat, Sujata Kundan, and Deepmala Gupta	Article ID 982965
107.	<i>Journal of Chemistry</i>	Synthesis and Spectroscopic studies of axially ligated Zn(II) 5,10,15,20-Meso-tetra(4-chlorophenyl)porphyrin with oxygen and nitrogen donors	2013	Gauri D. Bajju , Sujata Kundan, Ashu and Deepmala	Article ID 135815
108.	<i>J of Biosphere</i>	Ultrasonic investigation of molecular interaction in aqueous solution of 1,4-dioxane	2013	Vijayta Gupta, Amit Kumar Sharma and Meena Sharma	2(1) , 28-31
109.	<i>Archives of Applied Science Research</i>	Transport studies of aqueous solutions of organic solvents across composite cellophane separator at 298. 15 K	2013	Upasna Magotra, Sandarve and Meena Sharma	5(6) , 68-71
110.	<i>Applied Catalysis A: General</i>	Clay entrapped Cu(OH) _x as an efficient heterogeneous catalyst for ipso-hydroxylation of aryl boronic acids	2013	B. A. Dar, Prince Bhatti, A.P.Singh, Anish Lazar, Parduman R. Sharma, Meena Sharma and Baldev Singh	466 , 60-67

111.	<i>J of Industrial and Engineering Chemistry</i>	Heteropoly acid-clay nano-composite as a novel heterogeneous catalyst for the synthesis of 2,3-dihydroquinazolinones	2013	B. A. Dar, A. K. Sahu, Praveen Patidar, Parduman R. Sharma, Nagaraju Mupparapu, Dushyant Vyas, Sudip Maity, Meena Sharma and Baldev Singh	19 , 407-412
112.	<i>J of Industrial and Engineering Chemistry</i>	Grinding induced rapid, convenient and solvent free approach for the one pot synthesis of α -aminophosphonates using aluminium pillard interlayered clay catalyst	2013	B. A. Dar, Arup Chakraborty, Parduman R. Sharma, Varsha Shrivastava, Amrita Bhowmik, Dushyant Vyas, Prince Bhatti, Meena Sharma and Baldev Singh	19 , 732-738
113.	<i>Applied Clay Science</i>	Ultrasound promoted efficient and green protocol for the expeditious synthesis of 1,4 disubstituted 1,2,3-triazoles using Cu(II) doped clay as catalyst	2013	B. A. Dar, Amrita Bhowmik, Amit Sharma, Parduman R. Sharma, Anish Lazar, A.P.Singh, Meena Sharma and Baldev Singh	80-81 , 351-357
114.	<i>Chemical science Transactions</i>	Synthesis, Characterization and Antifungal Activity of Adducts of Bis(acetylacetonato)oxovanadium(IV) with Heterocyclic Nitrogen Donor Ligands	2014	Rajinder Singh, Neerupama, Gurpreet Kour, Pooja Sharma and Renu Sachar	3(3) , Art Id 856
115.	<i>European Chemical Bulletin.</i>	X-ray crystallography of bis(O-ethylxanthato)bis(3,5-dimethylpyridine)nickel(II)	2014	Kuldeep Singh, Gurpreet Kour, Ritu Sharma, Renu Sachar , Vivek K. Gupta, Rajnikant	3(5) , 463-465
116.	<i>Chemical Science Transactions</i>	Synthesis, Structure and Characterization of Adducts of O-Propyldithiocarbonates with Substituted Pyridines	2014	Inderjeet kour, Gurpreet kour, Renu Sachar	3(3) ,
117.	<i>Journal of Crystallography.</i>	Synthesis, Characterization, and X-Ray Structure of Bis(O-butylthiocarbonato)bis(3-ethylpyridine)nickel(II)	2014	Inderjeet Kour, Kuldeep Singh, Gurvinder Kaur, Renu Sachar , Vivek K.Gupta and Rajni Kant	Article ID 748425
118.	<i>X-ray Structure Analysis Online.</i>	Synthesis and Crystal Structure of Bis(O-ethylthiocarbonato)bis(4-ethylpyridine)nickel(II)	2014	Kuldeep Singh, Inderjeet Kour, Gurpreet Kour, Renu Sachar , Vivek K. Gupta and Rajnikant	29 ,15
119.	<i>International Journal of Inorganic Chemistry</i>	Synthesis and Characterization of the Adducts of Bis(O-ethylthiocarbonato)copper(II) with Substituted Pyridines	2014	Gurpreet Kour, Inderjeet kour and Renu Sachar	Article ID502856
120.	<i>Acta Chim. Slov.</i>	Synthesis, Characterization and X-ray Structure of the Adducts of Bis(O-butylthiocarbonato)nickel(II) with Substituted Pyridines	2014	Neerupama, Renu Sachar , Neha Sambyal, Kamini Kapoor, Kuldeep Singh, Vivek K. Gupta and Rajnikant	60 (2) , 397-402
121.	<i>X-ray Structure Analysis online</i>	Crystal structure of bis(o-propylthiocarbonato)bis(3,5-lutidine)nickel(II)	2014	Neerupama Sharma, Kuldeep Singh, Renu Sachar , Vivek Kumar Gupta, and Rajnikant	29(5) , 19
122.	<i>X-ray Structure Analysis Online.</i>	Synthesis and X-ray Crystal Structure of Bis(O-propylxanthato)-bis(3-chloropyridine)nickel(II)	2014	Kuldeep Singh, Inderjeet Kour, Gurpreet Kour, Renu Sachar , Vivek K. Gupta, and Rajnikant	28 , 69
123.	<i>X-ray Structure Analysis Online.</i>	Crystal Structure of Bis(O-n-butylthiocarbonato-S,S')(1,10-phenanthroline)manganese(II)	2014	Gurvinder Kour, Akshit Kumar, Inderjeet Kour, Gurpreet Kour, Renu Sachar , Vivek K. Gupta and Rajnikant	28 , 85
124.	<i>Journal of Chemical Crystallography.</i>	Synthesis and Characterization of the Adducts of Bis(O-amyldithiocarbonato)nickel(II) with Nitrogen Donors and X-ray Structure of Bis(O-amyldithiocarbonato)bis(3,5-dimethylpyridine)nickel(II)	2014	Kuldeep Singh, Neerupama, Inderjeet Kour, Renu Sachar , Vivek K. Gupta, Verma Rajnikant	42 , 1176-1181
125.	<i>Journal of Chemical and Pharmaceutical Research</i>	Preparation and characterization of the adducts of bis(morpholinedithiocarbamate)nickel(II) with substituted pyridines	2014	Deepshikha Khajuria, Pooja Sharma, Neerupama and Renu Sachar	6(7) , 2381-2386
126.	<i>Journal of Chemical and Pharmaceutical Research</i>	Preparation and characterization of the adducts of bis(piperidinedithiocarbamate)nickel(II) with substituted pyridines	2014	Deepshikha Khajuria, Neerupama, Pooja Sharma and Renu Sachar	6(6) , 643-648
127.	<i>Journal of Chemical and Pharmaceutical Research</i>	Synthesis and characterization of adducts of Bis(o-isobutylthiocarbonato)oxovanadium(IV) with substituted pyridines and their biological studies	2014	Neerupama, Pooja Sharma, Deepshikha Khajuria and Renu Sachar	6(7) , 1535-1540
128.	<i>Journal of Chemical and Pharmaceutical Research</i>	Synthesis, characterization and antifungal activities of adducts of nickel(II)thioxanthates with oxygen donor ligands	2014	Pooja Sharma, Deepshikha Khajuria, Neerupama and Renu Sachar	6(7) , 2061-2066
129.	<i>Journal of Chemical and Pharmaceutical Research</i>	Synthesis and characterization of adducts of bis(tertiarybutylthioxanthato)nickel(II) with ethylpyridines and chloropyridines and their antifungal activities	2014	Pooja Sharma, Neerupama, Deepshikha Khajuria and Renu Sachar	6(7) , 138-143
130.	<i>Chem Sci Trans.</i>	Synthesis and Characterization of Adducts of Bis(s-Alkyltrithiocarbonato)copper(II) with Oxygen Donor Ligands and Their Biological Activities	2014	Pooja Sharma, Neerupama, Gurpreet Kour, Rajinder Singh and Renu Sachar	3(4) , 1360-1365
131.	<i>Chem Sci Trans.</i>	Synthesis, Characterization and Biological Studies of Adducts of Nickel(II)thioxanthates with Substituted Pyridines	2014	Pooja Sharma, Gurpreet Kour, Neerupama and Renu Sachar	3(4) , 1569-1575
132.	<i>Chem Sci Trans.</i>	Synthesis, Characterization and Antifungal Activities of Adducts of Bis(O-isoamyldithiocarbonato)oxovanadium(IV) with Substituted Pyridines	2014	Neerupama, Deepshikha Khajuria, Pooja Sharma, Rajinder Singh and Renu Sachar	3(4) , 1555-1561
133.	<i>Chem Sci Trans.</i>	Synthesis, Characterization and Biological Application of Adducts of Bis(S-ethyltrithiocarbonato)nickel(II) with Heterocyclic Amines	2014	Gurpreet Kour, Inderjeet Kour, Pooja Sharma and Renu Sachar	3(4) , 1334-1341

134.	<i>Acta Chimica Slovenica</i>	Synthesis, Spectral and Antifungal Analysis of Diaryldithiophosphates of Mono- and Dibutyltin(IV): X-ray Structure of [[{ (3,5-CH ₃) ₂ C ₆ H ₃ O ₂ PS ₂ } ₂ Sn(nBu) ₂]]	2014	Atiya Atiya, Ruchi Ruchi, Sandeep Kumar, Amanpreet Kaur Jassal, Maninder S. Hundal and Sushil K Pandey	61, 866
135.	<i>Journal of Coordination Chemistry</i>	Disubstituted diphenyldithiophosphates of cadmium: synthesis, characterization, and single-crystal X- ray structure	2014	Ruchi Khajuria, Sandeep Kumar, Atiya Syed, Gurvinder Kour, Sumati Anthal, Vivek K Gupta, Rajni Kant, Sushil K Pandey	67, 7925
136.	<i>Acta Crystallographica</i>	Synthesis and structural characterization of donor stabilized disubstituted diphenyldithiophosphates of nickel(II)	2014	Sandeep Kumar, Ruchi Khajuria, Amanpreet Kaur Jassal, Geeta Hundal, Maninder S Hundal and Sushil K Pandey	Section B70,761
137.	<i>Bioinorganic Chemistry and Applications</i>	Syntheses, Characterization, Thermal, and Antimicrobial Studies of Lanthanum(III) Toly/Benzylthiocarbonates	2014	Savit Andotra, Nidhi Kalgotra, and Sushil K Pandey	Article ID 780631
138.	<i>Polyhedron</i>	The first nickel(II) complexes of disubstituted diphenyldithiophosphates: Synthesis, spectroscopic, electrochemical, antifungal and single crystal X-ray analysis	2014	Sandeep Kumar, Ruchi Khajuria, Vivek K Gupta, Rajni Kant, Sushil K Pandey	72, 140
139.	<i>Ceramics International</i>	Effect of substitution of magnetic rare earth Nd at non-magnetic La site on structure and properties of LaSrFeO ₄	2014	Devinder Singh , Suram Singh, Arun Mahajan and Nisha Choudhary	40, 1183
140.	<i>Monatshefte für Chem - Chemical Monthly</i>	Structural, electrical, and magnetic characterization of oxygen-deficient manganite La _{0.5} Sr _{1.5} Mn _{0.5} Cr _{0.5} O ₄ obtained by citrate precursor method	2014	Devinder Singh , Suman Sharma, Arun Mahajan and Nisha Choudhary	145, 253
141.	<i>Journal of the Korean Chemical Society</i>	Rietveld Refinements of K ₂ NiF ₄ -Type Phases Ln _{0.5} Sr _{1.5} Mn _{0.5} Fe _{0.5} O ₄ (Ln = La, Nd, Gd, and Dy)	2014	Devinder Singh , Arun Mahajan, and Rajinder Singh	58, 239
142.	<i>Monatshefte für Chem - Chemical Monthly</i>	Structure and magnetic properties of nano-sized perovskite oxide La _{0.5} Sr _{0.5} Ti _{0.5} Fe _{0.4} Cr _{0.1} O ₃ synthesized by the citrate precursor method	2014	Devinder Singh , Suram Singh and Arun Mahajan	145, 1235
143.	<i>Indian J. Chem.</i>	Ferric nitrate nonahydrate as a mild and efficient catalyst for the synthesis of β-enaminones	2014	R. Khajuria, Ambica, Y. Saini and K.K. Kapoor	53B (8), 1122-1127
144.	<i>Synth. Commun.</i>	Alum catalysed synthesis of 12-Aryl-8,9,10,12-tetrahydrobenzo[a]xanthen-11-ones under solvent-free Conditions	2014	R.K. Sharma, R. Khajuria and K.K. Kapoor	DOI: 10.1080/00397911.2014.935794
145.	<i>Curr.Microwave Chem.</i>	One-pot, solvent-free cascade synthesis of ethyl 3,5-disubstituted-1H-pyrrole-2-carboxylates under microwave irradiation	2014	R. Khajuria and K.K. Kapoor	2, 110-118
146.	<i>J. Saudi Chem. Soc.</i>	Synthesis and characterization of peroxo complexes of uranium(VI) with aroylhydrazone ligands	2014	B. Singh, S. Mahajan, H.N. Sheikh , B.L. Kalsotra	18(5), 494-501 DOI:10.1016/j.jscs.2011.10.012
147.	<i>J. Inorg. Organomet.Polym.</i>	Synthesis and crystal structure of coordination polymers of yttrium and holmium with hydrogen succinate and benzene-1,3-disulphonate	2014	Mohd Yawer, Swati Sharma, Mukaddus Kariem, Haq N. Sheikh	24(6), 1077-1085 DOI: 10.1007/s10904-014-0085-1
148.	<i>Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy</i>	Synthesis, crystal structure, photoluminescence, and DFT studies of bis(1,10-phenanthroline)di(κ ² OO' nitrate)cadmium(II) [Cd(phen) ₂ (NO ₃) ₂]	2014	Sumit Sanotra, Rimpay Gupta, Ujval Gupta, Yugal Khajuria, Haq Nawaz Sheikh	129, 392-399 DOI: 10.1016/j.saa.2014.03.092
149.	<i>Monatshefte für Chemie - Chemical Monthly</i>	Hydrothermal synthesis, structure and porosity studies of coordination polymer [Na ₂ (H ₂ O) ₈ Cu(pydc) ₂] _n	2014	Sumit Sanotra , Rimpay Gupta, Sonika Khajuria, Haq N. Sheikh , Bansi L. Kalsotra, Vivek K. Gupta, Rajnikant	145(3), 447-455 DOI: 10.1007/s00706-013-1092-6
150.	<i>Chemical Science review and letters</i>	Synthesis, spectroscopic characterization and antimicrobial screening of aluminium(III)porphyrin complexes containing substituted salicylates	2014	Gauri D. Bajju , Deepmala, Sujata Kundan and Altaf Ahmad	3(12), 1613-1622
151.	<i>World Journal of Pharmaceutical Research</i>	Toxicological studies of Indium(III)porphyrin complexes containing salicylates as axial ligand	2014	Gauri D. Bajju , Deepmala, VedKumar, Sujata Kundan and Altaf Ahmad	3(10), 1613-1622

152.	<i>Indian Journal of Applied Research</i>	Synthesis, spectroscopic properties and biological studies of mixed ligand zirconium(IV) porphyrinates	2014	Gauri D. Bajju , Gita Devi, Ashu and Sapna Katoch	4(12)
153.	<i>Bioinorganic Chemistry and Applications</i>	Axially ligated Zirconium(IV)Tetraphenylporphyrin: Synthesis, characterization and biological activity	2014	Gauri D. Bajju , Sunil Kumar Anand and Gita Devi	Article ID 543014
154.	<i>Bioinorganic Chemistry and Applications</i>	Synthesis and spectroscopic characterization of some new axially ligated Indium(III) macrocyclic complexes and their biological activities	2014	Gauri D. Bajju , Altaf Ahmad, Deepmala Gupta, Ashu Kapahi and Gita Devi	Article ID 865407
155.	<i>Bioinorganic Chemistry and Applications</i>	Synthesis, Spectroscopic and biological activities of Zn(II) porphyrin with Oxygen donor	2014	Gauri D. Bajju , Sujata Kundan, Madhulika Bhagat, Deepmala, Ashu, Gita Devi	Article ID 782762
156.	<i>Chemical Science Transactions</i>	Synthesis and Characterization of New Meso-Substituted and β -Substituted Unsymmetrical Metalloporphyrins	2014	Gauri D. Bajju , Narinder Singh and Deepmala	3(1) , 314-322
157.	<i>RSC Advances</i>	Ionic liquid coated sulfonated carbon/silica composites: novel heterogeneous catalysts for organic syntheses in water	2014	Princy Gupta, Manmeet Kour, Satya Paul and James H. Clark	4 , 7461-7470
158.	<i>Synlett</i>	A mild and simple method for the synthesis of phenazines	2014	Harpreet Kour, Satya Paul , Parvinder Pal Singh and Rajive Gupta	495-500
159.	<i>Synth. Commun.</i>	Silica-Functionalized CuI: An Efficient and Selective Catalyst for N-Benzylolation, Allylation, and Alkylation of Primary and Secondary Amines in Water	2014	Tahira Shamim, Vineet Kumar and Satya Paul	44 , 620-632
160.	<i>Chinese J. Catal.</i>	SiO ₂ -Cu ₂ O: An efficient and recyclable heterogeneous catalyst for N-benzylolation of primary and secondary amines	2014	Manjulla Gupta, Satya Paul and Rajive Gupta	35 , 444-450
161.	<i>Curr. Catal.</i>	Sulfonated Carbon/Silica Composites: Highly Efficient Heterogeneous Catalysts for the One-Pot Synthesis of Hantzsch 1,4-dihydropyridines, 2,4,5-trisubstituted Imidazoles and 2-arylbenzimidazoles	2014	Princy Gupta and Satya Paul	3 , 53-64
162.	<i>Catal. Today</i>	Solid acids: Green alternatives for acid catalysis	2014	Princy Gupta and Satya Paul	236 , 153-170
163.	<i>Tetrahedron Lett.</i>	Unprecedented conversion of (Z)-3-chloro-3-aryl acrylic acids to benzoic acids: Synthesis of s-triazolo[3,4-b][1,3,4] thiadiazoles	2014	Seema Sahi, Madhvi Bhardwaj and Satya Paul	55 , 3809-3812
164.	<i>J.Mol.Catal.A</i>	SiO ₂ -Copper (II) Chloride: An efficient and recyclable heterogeneous catalyst for one-pot synthesis of 3,4-dihydropyrimidine-2(1H)-ones	2014	Gurpreet Kour, Monika Gupta , Satya Paul, Rajni Kant, Vivek K.Gupta	392 , 260-264
165.	<i>Tetrahedron Letters</i>	Heterogeneous reusable catalyst, ultrasound energy and no solvent: A quick and green recipe for one pot synthesis of β -phosphonomalonitriles at room temperature	2014	B. A. Dar, Nalini Pandey, Snehil Singh, R. K. Bamezai , Meena Sharma, Ram A Vishwakarma and Baldev Singh	53 , 623-628
166.	<i>Russian J. of Phys. Chem.A</i>	Molecular interactions in β -alanine-water-methanol solutions at 308.15 K on volumetric, viscometric and acoustic data	2014	Balwinder Saini, Bindu Rani and R. K. Bamezai	88(1) , 47-51
167.	<i>Phys. and Chem.of Liq.</i>	Acoustical and excess thermodynamic studies of mixtures of 2-pyrrolidone with 1,3-propanediol and water as well as 1,3-propanediol with water at 308.15 K	2014	Balwinder Saini, Anjana Gupta, Renu Sharma and R. K. Bamezai	52 , 262-271
168.	<i>Archives of Applied Science Research</i>	Microstructural parameters affirm eutectic composite terminal nature	2014	B. L. Sharma, R. K.Bamezai , D. S. Sambyal, Sham Lal and Deepa Manhas	6 , 48-60
169.	<i>Applied Catalysis A: General</i>	Clay encapsulated Cu(OH) _x promoted homocoupling of arylboronic acids: An efficient and eco-friendly protocol	2014	B. A. Dar, Snehil Singh, Nalini Pandey, A.P.Singh, Priti Sharma, Anish Lazar, Meena Sharma , Ram A Vishwakarma and Baldev Singh	470 , 232-238

170.	<i>Comptes Rendus Chimie</i>	Oxidative homocoupling of terminal alkynes under palladium-, ligand- and base-free conditions using Cu(II) clay as a heterogeneous catalyst	2014	B. A. Dar, Dushyant Vyas, Varsha Shrivastava, Saleem Farooq, Amit Sharma, Sadhana Sharma, Pradhuman R Sharma, Meena Sharma and Baldev Singh	17, 316-323
171.	<i>Asian J. of Biochem. and Pharma. Research</i>	Study of frictional coefficients and activation parameters of 1,4-dioxane and D-mannitol through cellulose nitrate membrane at different temperatures	2014	Anjali Anand and Meena Sharma	4(3), 52
172.	<i>J. Chem. and Pharma. Research</i>	Comparative study of free volume and permeability coefficient of aqueous solutions of D-mannitol across cellulose acetate membrane at various temperatures	2014	Anjali Anand and Meena Sharma	6(5), 961-967
173.	<i>Chem. Sc. Transactions</i>	Comparative study of acoustical and transport properties of dimethyl sulphoxide and acetonitrile	2014	Upasna Magotra, Sandarve and Meena Sharma	3(1), 460-464
174.	<i>J. Chem. and Pharma. Research</i>	Interactions of L-alanine with anionic, cationic and non-ionic surfactants at different temperatures; a volumetric and viscometric study	2014	Upasna Magotra, Sandarve, Vijayta Gupta and Meena Sharma	6(6), 809-815
175.	<i>Chem. Sc. Transactions</i>	A study of acoustical and transport properties of binary mixtures of dimethyl sulphoxide and acetonitrile with water at 303.15 K	2014	Sandarve, Upasna Magotra and Meena Sharma	3(2), 608-613
176.	<i>Journal of Chemical & Pharmaceutical Research</i>	Ultrasonic investigation of molecular interaction in aqueous glycerol and aqueous ethylene glycol solution	2014	Vijayta Gupta, Amit Kumar Sharma and Meena Sharma	6(1), 714
177.	<i>Chem. Sc. Transactions</i>	Comparative ultrasonic and conductometric studies of aqueous sodium chloride and potassium chloride solutions	2014	Vijayta Gupta, Amit Kumar Sharma and Meena Sharma	3(2), 736-744
179.	<i>Chem. Sc. Transactions</i>	A study of anisotropic cellulose acetate membrane: An application to waste water treatment	2014	Mukesh Kumar, Amit Kumar Sharma and Meena Sharma	3(2), 833-839
180.	<i>J. Chem. and Pharma. Research</i>	Ultrasonic studies on molecular interactions of zinc sulphate in aqueous solutions of glucose at various concentrations	2014	Neha Sawhney, Mukesh Kumar, Amit Kumar Sharma and Meena Sharma	6(4), 1232-1242
181.	<i>Chemical Science Transactions</i>	Synthesis, characterization and biological studies of porphyrinylxovanadium(IV) benzimidazole complexes	2015	Gauri D. Bajju , Ved Kumar, Ashu and Gita Devi	4(2), 314-322
182.	<i>Indian Journal of Applied Research</i>	Synthesis, characterization and biological studies of porphyrinylchromium(III)benzimidazole complexes	2015	Gauri D. Bajju , Ved kumar, Ashu and Deepmala	5(1), Jan. 2015
183.	<i>Tetrahedron Lett.</i>	Conversion of α,β -unsaturated ketones to 1,5-diones via tandem retro-Aldol and Michael addition using $\text{Co}(\text{acac})_2$ covalently anchored onto amine functionalized silica	2015	Ravinderpal Kour Sodhi, Satya Paul , Vivek K. Gupta and Rajni Kant	56, 1944-1948
184.	<i>Green Chem.</i>	Silica functionalized sulphonic acid coated with ionic liquid: An efficient and recyclable heterogeneous catalyst for one-pot synthesis of 1,4-dihydropyridines under solvent free condition	2015	Pankaj Sharma, Monika Gupta	17 (2), 1100 – 1106
185.	<i>Monatshefte für Chem Fure</i>	One-pot synthesis of 1,4-disubstituted-1,2,3-triazoles via Huisgen 1, 3-dipolar cycloaddition catalysed by $\text{SiO}_2\text{-Cu(I)oxide}$ and single crystal X-ray analysis of 1-Benzyl-4-phenyl-1H-1,2,3-triazole	2015	Manjulla Gupta, Monika Gupta , Satya Paul, Rajnikant, Vivek K. Gupta	146, 143-148
186.	<i>Monatshefte für Chemie</i>	$\text{SiO}_2\text{-L-Proline}$: An efficient and recyclable heterogeneous catalyst for the Knoevenagel condensation in liquid phase	2015	Rupali Vaid, Monika Gupta	146(4), 645-652
187.	<i>Journal of Chemical Sciences</i>	$\text{SiO}_2\text{-Diphenic acid}$: A mild and effective heterogeneous catalyst for the synthesis of bis-(indolyl)methane derivatives	2015	Rupali Vaid, Monika Gupta , Omkar Singh Chambyal, Rajive Gupta	127 (6), 987-997

188.	<i>Dalton Transactions</i>	Iron nanotube-silica composites (ZVI-S-PCAT modified silica composites)-Preparation, Characterization and Application as a recyclable catalytic system for 5-membered ring organic transformations	2015	Gurpreet Kour, Monika Gupta , B. Viswanathan, K. Thiru	44 , 14975–14990
189.	<i>New Journal of Chemistry letters</i>	Nano rod shaped formation of an ionogel and its high catalytic activity for one-pot synthesis of benzothiazoles	2015	Pankaj Sharma, Monika Gupta	39 , 5116-5120
190.	<i>Journal of Chemical Sciences</i>	Silica functionalized Cu(II) catalysed selective oxidation of benzyl alcohols using TEMPO and molecular oxygen as an oxidant	2015	Manjulla Gupta, Pankaj Sharma, Monika Gupta , Rajive Gupta	127 (8), 1485
191.	<i>Mol. Cryst. Liq. Cryst.</i>	Studies of intermolecular hydrogen bonded complex of butyloxy benzoic acid and dipyridyl ethylene	2015	Ambika Sambyal, Gurpreet Kour, Shivangi Sharma, R. K. Bamezai , Sumati Anthal, V.K. Gupta, Rajnikant and C.V. Yellamagad	608 , 135-145
192.	<i>Indian J. of Pure and Applied Physics</i>	Physico-chemical properties of binary mixtures of ter-butanol with (nitro-, chloro- and bromo) benzene at 303.15 K and 308.15 K	2015	Balwinder Saini, Renu Sharma and Rajinder K Bamezai	53 , 790-795
193.	<i>Eur. J. Org. Chem.</i>	Regioselective oxidative C–H phosphonation of imidazo[1,2-a]pyridines and related heteroarenes mediated by manganese(III) acetate	2015	Mahipal Yadav, Saidulu Dara, Varma Saikam, Mukesh Kumar, Sravan Kumar Aithagani, Satya Paul , Ram A. Vishwakarma, and Parvinder Pal Singh	6526–6533
194.	<i>J. Mol. Catal. A: Chem.</i>	Novel heterogeneous catalyst systems based on Pd(0) nanoparticles onto amine functionalized silica-cellulose substrates [Pd(0)-EDA/SCs]: Synthesis, characterization and catalytic activity toward C–C and C–C coupling reactions in water under limiting basic conditions	2015	Madhvi Bhardwaja, Seema Sahia, Hitesh Mahajana, Satya Paul , James. H. Clark	408 , 48-59
195.	<i>New J. Chem.</i>	Sulfonated carbon/nano-metal oxide composites: A novel and recyclable solid acid catalyst for organic synthesis in benign reaction media	2015	Manmeet Kour and Satya Paul	39 , 6538-6550
196.	<i>App. Nanoscience</i>	Green hydrothermal synthesis and optical properties of γ -Gd ₂ S ₃ nanoparticles	2015	Sonika Khajuria, Jigmet Ladol, Sumit Sanotra, H. N. Sheikh	DOI 10.1007/s13204-015-0478-7
197.	<i>J. Solid. State Chem.</i>	Solvent induced synthesis, structure and properties of coordination polymers based on 5-hydroxyisophthalic acid as linker and 1,10-phenanthroline as auxiliary ligand	2015	M. Kariem, M. Yawer, H. N. Sheikh	231 , 239-247
198.	<i>J. Mater. Sci. - Mater. Electron.</i>	Synthesis, characterization and optical properties of cobalt and lanthanide doped CdS nanoparticles	2015	Sonika Khajuria, Sumit Sanotra, Jigmet Ladol, H. N. Sheikh	26 (9), 7073-7080
199.	<i>Acta Chim. Slov.</i>	Surfactant Assisted Sonochemical Synthesis and Characterization of Gadolinium Doped Zinc Oxide Nanoparticles	2015	Heena Khajuria, Jigmet Ladol, Rajinder Singh, Sonika Khajuria, H. N. Sheikh	62 , 849-858
200.	<i>Russian J. Coord. Chem.</i>	Synthesis, Crystal Structure and Porosity of 1D Coordination Polymer of Neodymium(III) with Isonicotinic Acid and Dimeric Complex of Neodymium(III) with Nicotinic Acid	2015	S. Sharma, M. Yawer, M. Kariem, R. Singh, and H. N. Sheikh	41 (7), 469-480
201.	<i>Monatshefte für Chemie - Chemical Monthly</i>	Hydrothermal synthesis, structure, porosity and luminescent properties of 3D coordination polymer of Holmium with 1,4-phenylenediacetic acid H ₂ (PDA) ₃ (H ₂ O) ₁₀ ·2nH ₂ O	2015	Mohd Yawer, Swati Sharma, Mukaddus Kariem, Haq N. Sheikh , Mohita Sharma	146 (1), 47-55
202.	<i>Org. Biomol. Chem.</i>	Divergent synthesis of 4, 6-diarylatedpyridin-2(1H)-ones from chalcones: Novel access to 2, 4, 6-triarylpyridines	2015	Rajni Khajuria, Prakash Kannaboina, Kamal K. Kapoor , Annah Gupta, Gaurav Raina, Amanpreet Kaur Jassal, Love Karan Rana, Maninder S. Hundal and Parthasarathi Das	13 , 5944-5954
203.	<i>Tetrahedron Lett.</i>	A solvent-free one step conversion of ketones to amides via Beckmann rearrangement catalysed by FeCl ₃ ·6H ₂ O in presence of hydroxylamine hydrochloride	2015	Sheena Mahajan, Bhavana Sharma, Kamal K. Kapoor	56 , 1915-1918
204.	<i>Indian J. Chem.</i>	Metal-free reductive amination of aldehydes for the synthesis of secondary and tertiary amines	2015	Ambica, Rajni Khajuria, Yeshwinder Saini and Kamal K. Kapoor	54B , 1252-1259
205.	<i>Journal of Chemical and Pharmaceutical Research</i>	Volumetric and refractive index behavior of L-valine with tetradecyltrimethylammonium bromide and cetyltrimethylammonium bromide at different temperatures	2015	Sandarve, Upasna Magotra, Vijayta Gupta and Meena Sharma	7 (2), 370-377
206.	<i>Journal of Chemistry, Environmental Sciences and its Applications</i>	Molecular Interaction Studies of Aqueous Acetonitrile Solutions Using Ultrasonic Technique	2015	Vijayta Gupta, Upasna Magotra, Amit Kumar Sharma and Meena Sharma	1 (2), 111–119
207.	<i>Phosph. Sulfur and Silicon and the Related Elements</i>	First Donor Stabilized Complexes of Manganese(II) with Disubstituted Diphenyldithiophosphates: Synthesis, Characterization, Biological and X-ray Analysis	2015	Mehak Sajgotra, Ruchi Khajuria, Sandeep Kumar, Atiya Syed, Savit Andotra, Gurvinder Kour, Vivek. K. Gupta, Rajni Kant & Sushil K. Pandey	190 , 1658-1667
208.	<i>Transition Metal Chemistry</i>	Iron(II) and iron(III) complexes of 3,5-dimethyl diphenyldithiophosphate: synthesis, characterization and single-crystal X-ray analysis	2015	Sandeep Kumar, Ruchi Khajuria, Atiya Syed, Vivek K. Gupta, Rajni Kant, Sushil K. Pandey	40 , 519 (2015)
209.	<i>Monatsh Chem.</i>	O,O'-Dimethyl diphenyldithiophosphates of nickel(II) with N-donor ligands	2015	Sandeep Kumar, Ruchi Khajuria, Atiya Syed, Amanpreet Kaur Jassal, Love Karan Rana, Geeta Hundal and Sushil K. Pandey	DOI :10.1007/s00706-015-1569-6

210.	<i>Acta Chimica Slovenica</i>	Dialkyltin(IV)bis(O-tolyl/benzyl)dithiocarbonate) Complexes: Spectroscopic, Thermogravimetric, Antifungal and Crystal Analysis of [(n-Bu) ₂ Sn(S ₂ COCH ₂ C ₆ H ₅) ₂]	2015	Bhawana Gupta, Deepak Kumar, Nidhi Kalgotra, Savit Andotra Gurvinder Kour, Vivek Kumar Gupta, Rajni Kant and Sushil Kumar Pandey	62 , 204
211.	<i>Journal of Chemical and Pharmaceutical Research</i>	Ditolyldithiophosphates of titanium: Synthesis, characterization and in vitro antimicrobial and cytotoxic studies	2015	Syed Atiya, Khajuria Ruchi, Kumar Sandeep, and Pandey Sushil K.	7(4) , 356-365
212.	<i>Acta Crystallographica Section B</i>	Synthesis and structural elucidation of new complexes of 2,4- and 3,5-dimethyl diphenyl dithiophosphates with cobalt(II)	2015	Kumar Sandeep, Khajuria Ruchi, Jassal Amanpreet Kaur, Hundal Maninder S. and Pandey Sushil K.	71 , 221
213.	<i>Monatshefte für Chemie - Chemical Monthly</i>	Synthesis, structure, and magnetic properties of the perovskite La _{0.3} Sm _{0.2} Sr _{0.5} Ti _{0.5} Fe _{0.5} O ₃	2015	D. Singh , N. D. Sharma, A. Mahajan and S. Singh	DOI 10.1007/s00706-015-1548-7, Published online: 19 August 2015
214.	<i>Monatshefte für Chemie - Chemical Monthly</i>	Synthesis and characterization of half-doped chromium manganite La _{0.3} Dy _{0.2} Sr _{0.5} Mn _{0.5} Cr _{0.5} O ₃	2015	D. Singh* , N. D. Sharma and A. Mahajan	DOI 10.1007/s00706-015-1540-6, Published online: 31 July 2015
215.	<i>Ceramics International</i>	Synthesis and characterization of Ruddlesden-Popper oxides Nd _{1+x} Sr _{2-x} MnCrO ₇ (x = 0.0, 0.2 and 0.4)	2015	D. Singh* and A. Mahajan	41 , 15048-15056
216.	<i>Ceramics International</i>	Investigation of structural, magnetic and electric transport properties of half-doped chromium manganites La _{0.3} R _{0.2} Sr _{0.5} Mn _{0.5} Cr _{0.5} O ₃ (R = La, Nd, Sm, and Gd)	2015	D. Singh* and A. Mahajan	41 , 11748-11755
217.	<i>Journal of Sol-Gel Science and Technology</i>	Effect of size disorder on the structure and magnetic properties of La _{0.3} R _{0.2} Sr _{0.5} Ti _{0.5} Fe _{0.5} O ₃ (R = La, Nd, Gd and Dy)	2015	D. Singh* and A. Mahajan	76 , 171-179
218.	<i>Journal of Alloys and Compounds</i>	Effect of A-site cation size on the structural, magnetic, and electrical properties of La _{1-x} Nd _x Mn _{0.5} Cr _{0.5} O ₃ perovskites	2015	D. Singh* and A. Mahajan	644 , 172-179
219.	<i>Ionics</i>	Nanosized rare earth cobaltite LaCoO ₃ synthesized by urea combustion method	2015	D. Singh* , N. Choudhary, A. Mahajan, S. Singh and S. Sharma	21 , 1031-1037
220.	<i>Catal. Lett.</i>	Novel Cu(0)-Fe ₃ O ₄ @SiO ₂ /NH ₂ cel as an efficient and sustainable magnetic catalyst for the synthesis of 1,4-disubstituted-1,2,3-triazoles and 2-substituted-benzothiazoles via one-pot strategy in aqueous media	2016	Madhvi Bhardwaj, Babita Jamwal and Satya Paul	146 , 629-644
221.	<i>J. Mol. Catal. A: Chem.</i>	Preparation and characterization of Lewis acid grafted sulfonated carbon@titania composites for the multicomponent synthesis of 4H-pyrimido[2,1-b]benzothiazoles and benzoxanthenones undersolvent-free conditions	2016	Manmeet Kour, Satya Paul , James H. Clark, Vivek K. Gupta, Rajni Kant	411 , 299-310
222.	<i>J. Chromatographic Sci.</i>	Isolation, chemical fingerprinting and simultaneous quantification of four compounds from tanacetum gracile using a validated HPLC-ESI-QTOF-Mass spectrometry method	2016	Neha Sharma, Chetan Kumar, Prabhu Dutt, Suphla Gupta, Naresh K. Satti, Suresh Chandra, Surinder Kitchlu, Satya Paul , Ram A. Vishwakarm, and Mahendra K. Verma	(Advance article, DOI: 10.1093/chromsci/bmw013)
223.	<i>Med. Chem. Res.</i>	Synthesis and biological evaluation of quinolines, thiazolo[3,2-a]pyrimidines, thiadiazolo[3,2-a]pyrimidines and triazolo [3,4-b][1,3,4]thiadiazepines as antimicrobial agents	2016	Seema Sahi, Satya Paul	(Advance article, DOI: 10.1007/s00044-016-1540-z)
224.	<i>New J. Chem.</i>	Fe ₃ O ₄ @SiO ₂ /EDAC-Pd(0) as a novel and efficient inorganic/organic magnetic composite: Sustainable catalyst for the benzylic C-H bond oxidation and reductive amination under mild conditions	2016	M. Bhardwaj, H. Sharma, S. Paul and J. H. Clark	(Accepted article, DOI: 10.1039/C5NJ03413B)
225.	<i>Mater. Res. Bull.</i>	Surfactant mediated hydrothermal synthesis, characterization and luminescent properties of GdPO ₄ : Ce ³⁺ /Tb ³⁺ @ GdPO ₄ core shell nanorods	2016	Heena Khajuria, Jigmet Ladol, Sonika Khajuria, Mohd Syed Shah, H. N. Sheikh	Doi:10.1016/j.materresbull.2016.03.022

226.	<i>Acta Chim. Slov.</i>	Synthesis, Structural and Optical Characterization of Copper and 1 Rare Earth doped CdS Nanoparticles	2016	Sonika Khajuria, Sumit Sanotra, Heena Khajuria, Anuraag Singh, H. N. Sheikh	63 , 104-112
227.	<i>J. Mater. Sci. - Mater. Electron.</i>	BaLaF5, BaLaF5:Eu3+, BaLaF5:Eu3+/Tb3+ and BaLaF5:Eu3+@BaLaF5:Gd3+ core/shell nanoplates: hydrothermal synthesis, luminescence and magnetic properties	2016	Jigmet Ladol, Heena, Khajuria, H. N. Sheikh	27 , 4084-4092
228.	<i>Monatshefte für Chemie - Chemical Monthly</i>	Sacrificial template synthesis and characterization of photoluminescent silver sulphide nanochains	2016	Sonika Khajuria, Sumit Sanotra, Heena Khajuria, H. N. Sheikh	147 , 665-670
229.	<i>Monatshefte für Chemie - Chemical Monthly</i>	Synthesis and structure of coordination polymers of praseodymium(III) and erbium(III) with hydrogen maleate and benzene-1,3-disulfonate as linkers	2016	Swati Sharma, M. Yawer, M. Kariem, and H. N. Sheikh	147 , 349-357
230.	<i>Australian J. Chemistry</i>	Silica-L-proline [EMIM][EtSO4]: An efficient and recyclable heterogeneous catalyst for one-pot synthesis of 3,4-dihydropyrimidin-2(1H)-ones	2016	Pankaj Sharma, Manjulla Gupta, Monika Gupta , Rajive Gupta	69 , 230-238
231.	<i>Journal of Chemical Sciences</i>	1,3,5-Trimethylpyrazolium chloride based ionogel as an efficient and reusable heterogeneous catalyst for the synthesis of benzimidazoles	2016	Pankaj Sharma, Monika Gupta	128 , 61-65
232.	<i>Journal of Iranian Chemical Society</i>	Dopping of copper (I) oxide onto a solid support as a recyclable catalyst for acetylation of amines/alcohols/phenols and synthesis of trisubstituted imidazole	2016	Manjulla Gupta, Monika Gupta	13 , 231-234
233.	<i>RSC Advances</i>	One-pot synthesis of various 2-amino-4H-chromene derivatives using highly active supported ionic liquid catalyst	2016	Pankaj Sharma, Monika Gupta , Rajani Kant, Vivek K. Gupta	6 , 32052 - 32059
234.	<i>Journal of Chemical Sciences</i>	Copper (0) nanoparticles onto silica: A stable and facile catalyst for one-pot synthesis of 2,2'-arylmethylene bis (3-hydroxy-5,5-dimethyl-2-cyclohexene-1-one) via cascade Knoevenagel/Michael reaction	2016	Manjulla Gupta, Monika Gupta	(Accepted)
235.	<i>ACS Med. Chem. Lett.</i>	Discovery of novel and orally bioavailable inhibitors of P13 Kinase based on indazole substituted morpholino-triazines	2016	Sundeep Dugar, Frank P. Hollinger, Dinesh Mahajan, Somdutta Sen, Bilash Kuila, Reena Arora, Yogesh Pawar, Vaibhav Shinde, Mahesh Rahinj, Kamal K. Kapoor , Rahul Bhumkar, Santosh Rai and Rakesh Kulkarni	6 , 1190-1194
236	<i>Tetrahedron</i>	Unprecedented reaction of ninhydrin with ethyl cyanoacetate and diethyl malonate on ultrasonic irradiation	2016	Yeshwinder Saini, Rajni Khajuria, Love Karan Rana, Maninder S. Hundal, Vivek K. Gupta, Rajni Kant and Kamal K. Kapoor	72 , 257-263
237.	<i>Synth. Commun.</i>	Reaction of 3-(2-nitrophenyl)-1-arylprop-2-en-1-ones with triethylphosphite in microwave revisited: One-pot synthesis of 2-aryloindoles and 2-arylquinolines	2016	Annah Gupta, Rajni Khajuria, Kamal K. Kapoor	46 , 31-38
238.	<i>RSC Adv.</i>	Active methylenes in the synthesis of pyrrole motif: An imperative structural unit of Pharmaceuticals, Natural Products and Optoelectronic materials	2016	Rajni Khajuria, Sumita Dham and Kamal K. Kapoor	(Accepted with Minor Revision)
239.	<i>Journal of Chemical Sciences</i>	Triethyl ammonium salt of dimethyl diphenyldithiophosphates: Single crystal X-ray and DFT analysis	2016	Sandeep Kumar, Ruchi Khajuria, Mandeep Kaur, Rakesh Kumar, Love Karan Rana, Geeta Hundal, Vivek K. Gupta, Rajni Kant and Sushil K. Pandey	(Accepted, JCSC-D-15-00775, 2016)
240.	<i>Crystallography Reports</i>	Synthesis, characterization and single crystal X-ray analysis of iron(II) bis(2,4-dimethylphenyl)dithiophosphate with 4-ethylpyridine	2016	Sandeep Kumar, Savit Andotra, Mandeep Kaur, Vivek K. Gupta, Rajni Kant and Sushil K. Pandey	(Accepted, 2016)
241.	<i>Phys. and Chem. of Liquids</i>	Volumetric and compressibility studies for (L-arginine + D-maltose monohydrate + water) system in the temperature range of (298.15 to 308.15 K)	2016	Ashwani Kumar, Ruby Rani, Anjana Gupta, Balwinder Saini and Rajinder K Bamezai	DOI No. 10.1080/00319104.2016.1139709

- Monographs : *Nil*
 - Chapters in Books 01 (*Prof. B.L. Sharma*)
 - Edited Books: *Nil*
 - Books with ISBN with details of publishers : *Nil*
 - Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
Journals are listed in Web of Science and Scopus
 - Citation Index – range / average
Citation Index could not be calculated since it depends paperwise and individually however we found citation value of 107 research papers is > 10.
 - SNIP *NA*
 - SJR *NA*
 - Impact Factor – range / average
0.3 – 12.11
 - h-index *It depends paperwise.*

23. Details of patents and income generated (w.e.f. 1st June 2009 to 28th February 2015)

1.	Novel process for synthesis of polyphenols Sundee Dugar, Dinesh Mahajan, Pantelis Peter Giannousis, Vijay Singh, Kamal Kishore Kapoor, Application number: 2014003142, Filed: January 24, 2012, Issued: January 30, 2014
2.	Novel Trazine compounds Sundee Dugar, , Dinesh Mahajan, and Rushikesh Chandrabhan Deokar, Frank Peter Hollinger , Kamal K. Kapoor Application number: 20130303516 Filed: January 25, 2012 Issued: November 25, 2014
3.	Aminonitriles as Kynurenine pathway inhibitors Monali Banerjee, Sandip Middya, Ritesh Shrivastava, Sushil Raina, Arjun Surya, Veejendra K. Yadav, Kamal K. Kapoor Publication No. : WO 2014/141110 A2 dated September 18, 2014 Filing Date: March 13, 2014

24. Areas of consultancy and income generated (w.e.f. 1st June 2009 to 28th February 2015)

- **Kamal K Kapoor** Advisory Consultant , Curadev Pharma Pvt Ltd, Noida. Two Years 2010 and 2011, Income Generated Rs. 2.52 lakhs.

25. Faculty selected nationally / internationally to visit other laboratories / institutions

- a. industries in India and abroad (w.e.f. 1st June 2009 to 28th February 2015)
 - Kamal K Kapoor was selected as Director, Medicinal Chemistry, Shpaera Pharma Pvt Ltd IMT Manesar, Haryana.
 - Prof. S.K. Pandey was selected as INSA Fellow (in 2009) at Institute of Inorganic

Chemistry, Gottingen, Germany.

- Prof. Satya Paul was selected as INSA Fellow (in 2009) at Institute of Organic Chemistry, Gottingen, Germany.
- Dr. Devinder Singh was selected as Visiting Faculty Fellow (in December 2012) at Indian Institute of Science (IISc), Bangalore.

26. Faculty serving in

- a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Prof. Renu Sachar

1. Prof. Renu Sachar has been nominated as a member of the Jammu University Syndicate (2015-17).

Prof. S.K. Pandey

1. Prof. S.K. Pandey has been elected as a member of Sectional Committee (Chemical Sciences), ISCA (2014-15)
2. Prof. S.K. Pandey was selected as member of Board of Studies in Chemistry, Kurukshetra University, Kurukshetra.
3. Reviewer of the following international Journals:
 - (i) Coordination Chemistry
 - (ii) Phosphorus, Sulphur, Silicon and related elements
 - (iii) Polyhedron
 - (iv) Synthesis, reactivity of inorganic and metal organic
 - (v) RSC Advances

Prof. Kamal K Kapoor

1. Prof. K.K. Kapoor has been selected as Convener, J & K Sector of Chemical Research Society of India (2015).
2. Prof. Kamal K. Kapoor was selected as member of Board of Studies in Chemistry, Garhwal University, Srinagar, Uttarakhand.
3. Prof. Kamal K Kapoor was selected as Director, Medicinal Chemistry, Shpaera Pharma Pvt Ltd IMT Manesar, Haryana.
4. Council member of Chemical Research Society of India (CRSI, Bengaluru) for six years [2008-2011 and 2011-2014_two consecutive terms]
5. Organising Secretary, CRSI North Zone Meeting held at Jammu University [Sept 22-24, 2011]
6. Convener, 7th Science Communicator's Meet (Feb 4-5, 2014) at 101st Indian Science

Congress hosted by University of Jammu (Feb 3-7, 2014)

7. Convener, CRSI- Jammu and Kashmir Local Chapter
8. Reviewer in Development Team of e-pathshala in Chemistry (Organic), Centre of e-learning SGTB Khalsa College, University of Delhi, Delhi
9. Reviewer of the following International Journals:
 - (i) Tetrahedron
 - (ii) Tetrahedron Letters
 - (iii) Synthetic Communications
 - (iv) Research on Chemical Intermediates

Prof. Satya Paul

1. Guest Editor of The Open Catalysis Journal, Bentham Science Publishers.
2. Reviewer of the following international Journals:
 - (i) RSC Advances
 - (ii) Green Chemistry
 - (iii) Tetrahedron
 - (iv) Molecular Catalysis

Dr. Devinder Singh

1. Reviewer of the following international Journals:
 - (i) Journal of Alloys and Compounds
 - (ii) Materials Chemistry and Physics
 - (iii) Ionics

Dr. Monika Gupta

1. Member of Editorial Board of Refrees (EBR) in the following Journals:
 - (i) Open Catalysis Journal
 - (ii) ARKIVOC
 - (iii) Green and Sustainable Chemistry (Associate Editor)
2. Reviewer of the following international Journals:
 - (i) RSC Advances
 - (ii) ARKIVOC

- (iii) International Journal of pharmaceutical and biomedical research
 - (iv) Green and Sustainable Chemistry
 - (v) Current Organic Chemistry
 - (vi) Synthetic Communication
 - (vii) J. Mol. Catal. A
 - (viii) Journal of advances in Chemistry
 - (ix) New Journal of Chemistry
 - (x) Journal of Heterocyclic chemistry
 - (xi) Journal of Chemical Sciences
27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).
(w.e.f. 1st June 2009 to 28th February 2015)
- (a) Three weeks Refresher Course was organized in the Department of Chemistry, University of Jammu by ASC, Jammu University, w.e.f 04.12.2010 to 25.01.2011. In addition to the faculty members of the Department, faculty from other University/Institution such as Dr. A.K. Suri, IIIM Jammu; Prof. R.K. Mahajan, GNDU Amritsar; Prof. M.A. Qureshi, Kashmir University, Srinagar; Prof. V.K. Aggarwal, National Institute of Technical Teachers Training & Research, Bhopal acted as resource persons.
 - (b) Three weeks Refresher Course was organized in the Department of Chemistry, University of Jammu by ASC, Jammu University, w.e.f 04.02.2013 to 22.02.2013. In addition to faculty members of the Department, resource persons from other Departments/University/Institution such as Prof. Rajnikant, Department of Physics & Electronics, Jammu University, Prof. P.S. Kalsi, Punjab Agricultural University, Ludhiana etc. also delivered lectures.
28. Student projects (w.e.f. 1st June 2009 to 28th February 2015)
- a. percentage of students who have done in-house projects including inter-departmental projects
Nil
 - b. percentage of students doing projects in collaboration with other universities
 - 1. industry / institute
Nil
29. Awards / recognitions received at the national and international level by
- a. Faculty (w.e.f. 1st June 2009 to 28th February 2015)

Dr. Monika Gupta

- Received Award of “*Eminent Scientist of the Year-2012*” by International Board of referees, National Environmental Science Academy (NESA) New Delhi in collaboration with Ministry of Earth Sciences (MoES) and award ceremony held in Indian National Science Academy (INSA) New Delhi during International Conference on 28th-29th Nov. 2012 (Honoured with gold medal, silver memento, citation and certificate).
- Recipient of “Young Scientist Award -2010” in Chemical Sciences on 17th Sept. 2012 during 8th JK Science Congress from 17th-19th Sept. 2012 in Kashmir University by J&K Govt., Department of Science and Technology (J&K) by Hon’ble Vice-President of India Sir Hamid. A. Ansari.
- Received Award “*Scientist of the Year-2011*” by International Board of Refrees, National Environmental Science Academy Award (NESA), New Delhi during International Conference held in Presidency College Bangalore in collaboration with CSIR and MoES (Ministry of Earth Sciences) on 28-29th Dec. 2011 (Honoured with gold medal, silver memento, citation and certificate).
- Received Award “*Environmentalist of the Year -2010*” by International Board of Refrees, National Environmental Science Academy Award (NESA) New Delhi, on 27th Dec. 2010 (Honoured with gold medal, silver memento, citation and certificate).

INSA Fellowships: Prof. S.K. Pandey (2009)

Dr. Satya Paul (2009)

CRSI Best Teacher Award: Dr. H.N. Sheikh (2010)

b. Doctoral / post doctoral fellows

Nil

c. Students

Nil

30. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any. (w.e.f. 1st June 2009 to 28th February 2015)

CRSI North Zone Meeting was held at Jammu University from September 22-24, 2011 in the Department of Chemistry, University of Jammu, in collaboration with IIIM Jammu. Source of funding was J&K State Council of Science and Technology, CRSI Bangalore and sponsorship from advertisements. Various speakers made an outstanding participation in this meet by delivering informative talks in various sessions such as Dr. Ram A. Vishwakarma, Director, IIIM Jammu; Prof. A. Sampath, IISc Bangalore; Dr. Akhilesh Kumar Verma, Delhi University; Dr. Ganga Ram Chaudhary, Punjab University Chandigarh; Prof. Sushil K. Pandey, University of Jammu, Jammu; Dr. A.K. Sinha, IHBT, Palampur; Prof. Rakesh K. Mahajan,

GNDU, Amritsar; Dr. P. Jeevanandam, IIT Roorkee; Dr. N.G. Ramesh, IIT Delhi; Dr. Parthasarathi Das, IIIM Jammu; Dr. Sanjay Batra, CDRI Lucknow; Prof. Manoj Kumar, GNDU Amritsar; Dr. Frank P. Hollinger, Sphaera Pharma, Singapore/India/US, Wayne, PA USA; Mr. R. Raghu, Schrodinger Inc., USA; Prof. P.V. Bharatam, NIPER, Mohali; Mr. Surojit Sadhu, Vans Information Ltd., Mumbai; Prof. S. Ramakrishnan, IISc Bangalore; Dr. M. Anbu Kulandainathan, CECRI, Karaikudi (TN); Dr. Vibha Tandon, Delhi University and Dr. Parmeshwar K. Iyer, IIT Guwahati. In addition to it, other prominent dignitaries such as Prof. S. Chandrasekaran from IISc Bangalore, Prof. R.N.K. Bamezai from SMVDU, Katra and Prof. A.K. Bakshi from UPRTO University Allahabad were also made significant contribution in the meet. About 74 posters were presented in the CRSI Meet.

31. Code of ethics for research followed by the departments

Plagiarism is checked using software and follow all ethical guidelines as given by journals for publication of research work.

32. Student profile programme-wise: (w.e.f. 1st June 2009 to 28th February 2015)

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc. (2009-10)	716	14	35	57.14	62.85
M.Sc. (2010-11)	946	11	41	63.63	82.92
M.Sc. (2011-12)	265	16	29	68.75	65.51
M.Sc. (2012-13)	707	17	36	64.70	75.00
M.Sc. (2013-14)	153	14	34	85.71	88.23
M.Sc. (2014-15)	207	08	43	–	–
M.Sc. (2015-16)	1200	08	42	–	–

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Phil. (2009-10)	34	02	13	100	100
M.Phil. (2010-11)	64	04	08	100	100
M.Phil. (2011-12)	47	04	12	100	100
M.Phil. (2012-13)	69	02	09	100	100
M.Phil. (2013-14)	113	-	-	-	-
M.Phil. (2014-15)	74	02	01	100	100
M.Phil. (2015-16)	39	-	01	-	-

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Ph.D. (2009)	55	03	04		
Ph.D. (2010)	64	03	12		
Ph.D. (2011)	86	02	13		
Ph.D. (2012)	60	05	11		
Ph.D. (2013)	10	03*	07*		
Ph.D. (2014)	07	04*	03*		
Ph.D. (2015)	01	–	01*		

*Candidates enrolled to Ph.D. from M.Phil. Programme.

33. Diversity of students (w.e.f. 1st June 2009 to 28th February 2015)

Name of the Programme	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Sc. (2009-10)	100	-	-	-
M.Sc. (2010-11)	98.67	-	1.92	-
M.Sc. (2011-12)	100	-	-	-
M.Sc. (2012-13)	98.11	-	1.88	-
M.Sc. (2013-14)	100	-	-	-
M.Sc. (2014-15)	100	-	-	-

Name of the Programme	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Phil. (2009-10)	100	-	-	-
M.Phil. (2010-11)	100	-	-	-
M.Phil. (2011-12)	100	-	-	-
M.Phil. (2012-13)	100	-	-	-
M.Phil. (2013-14)	-	-	-	-
M.Phil. (2014-15)	100	-	-	-
M.Phil. (2015-16)	100	-	-	-

Name of the Programme	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
Ph.D. (2009)	100	-	-	-
Ph.D. (2010)	100	-	-	-
Ph.D. (2011)	100	-	-	-
Ph.D. (2012)	100	-	-	-
Ph.D. (2013)	100	-	-	-
Ph.D. (2014)	100	-	-	-
Ph.D. (2015)	100	-	-	-

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. (w.e.f. 1st June 2009 to 28th February 2015)

Year	Students cleared NET	Students cleared SET	Students cleared GATE
2009	05	-	-
2010	04	-	-
2011	08	-	-
2012	12	-	-
2013	09	-	-
2014	06	-	02
2015	03	-	-
2016	06	-	01

35. Student progression (w.e.f. 1st June 2009 to 28th February 2015)

Student progression	Percentage against enrolled	
UG to PG	Nil	
PG to M.Phil.	Year 2009-10	30.61%
	Year 2010-11	23.07%
	Year 2011 -12	33.33%
	Year 2012-13	20.75%
	Year 2013 -14	-
	Year 2014 -15	29.41%
PG to Ph.D.	Year 2015 -16	02.00%
	Year 2009	06.12%
	Year 2010	11.53%
	Year 2011	02.22%
	Year 2012	11.32%
	Year 2013	08.69%
	Year 2014	09.80%
	Year 2015	02.00%
Ph.D. to Post -Doctoral	-	
Employed Campus selection	In 2013, one student was selected during Campus selection.	
Other than campus recruitment	Many students of the Department are adjusted in various posts in the Senior Secondary Schools, Higher Education Departments, Universities, General Administration Department and other Scientific Organizations of the Jammu and Kashmir Government. A large number of students join various pharmaceutical and other bio-tech industries. A number of our students are holding prestigious assignments in other Universities / Institutions. Some of our students are actively involved in research at national and international level.	
Entrepreneurs	Dr. Rajesh Thapar (Alumni of this Department) has started consultancy and a unit of manufacturing of active pharmaceutical ingredients.	

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	82%
from other universities within the State	Nil
from universities from other States from	18%
universities outside the country	Nil

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period (w.e.f. 1st June 2009 to till date)

Nil

38. Present details of departmental infrastructural facilities with regard to

a. Library

Library is equipped with various books of different sections of Chemistry such as Organic, Inorganic, Physical, Medicinal, Polymer, Organometallic, Catalysis, Solid State etc. About 5500 books, including reference books are available in the library. Journals number 231 for the period 2010-15 which are of national and international repute such as Journal of American Chemical Society, Indian Journal of Chemistry Sec A, Journal of Polymer Science, Journal of Chemical Research, Synthetic Communication etc. In addition to these, one Photostat machine, connected with a PC with internet is available in the library of the Department at the disposal of students, research scholars and faculty members.

b. Internet facilities for staff and students

The Department has a computer laboratory with internet facility, dedicated to the students and scholars of the Department (for official use). Besides, the Department has wi-fi facility. Free of cost internet access facility is available to all the staff and students.

c. Total number of class rooms

02

d. Class rooms with ICT facility

Nil

e. Students' laboratories

04

f. Research laboratories

11

39. List of doctoral, post-doctoral students and Research Associates (w.e.f. 1st June 2009 to till date)

a) from the host institution/university

S.no. / Name	Class	Date
List of Doctoral Students		
1. Mohita Sharma	Ph.D.	03.07.2009
2. Amit Kumar Sharma	Ph.D.	07.09.2009
3. Navjot Jamwal	Ph.D.	24.11.2009
4. Sunil Kumar Bhat	Ph.D.	24.11.2009
5. Anju Sharma	Ph.D.	09.03.2010
6. Suvercha Sharma	Ph.D.	26.08.2010
7. Kuldeep Kumar Sharma	Ph.D.	15.10.2010
8. Sajdha	Ph.D.	27.12.2010
9. Pashotam Lal	Ph.D.	08.03.2011
10. Savita Gupta	Ph.D.	16.05.2011
11. Poonam Gupta	Ph.D.	16.05.2011
12. Shallu Gupta	Ph.D.	24.06.2011
13. Indu Khajuria	Ph.D.	30.08.2011
14. Nitu Mahajan	Ph.D.	25.01.2012
15. Monika Gupta	Ph.D.	29.02.2012
16. Simpy Mahajan	Ph.D.	29.02.2012
17. Balgar Singh	Ph.D.	17.04.2012
18. Sunil Kumar Anand	Ph.D.	31.05.2012
19. Bhushan Kumar	Ph.D.	26.07.2012
20. Arun Kumar Sharma	Ph.D.	26.07.2012
21. Shally Chadha	Ph.D.	30.10.2012
22. Suresh Kumar Magotra	Ph.D.	04.12.2012
23. Princy Gupta	Ph.D.	05.04.2013
24. Ambica	Ph.D.	05.04.2013
25. Deepak Choudhary	Ph.D.	05.04.2013
26. Deepak Kumar	Ph.D.	19.06.2013
27. Mousami Sharma	Ph.D.	16.09.2013
28. Sushma Sharma	Ph.D.	01.08.2013
29. Rimpay Gupta	Ph.D.	19.03.2014
30. Balwinder Saini	Ph.D.	18.06.2014
31. Tahira Shamim	Ph.D.	18.06.2014
32. Ravinde Pal Kour	Ph.D.	16.02.2015
33. Inderjeet Kour	Ph.D.	03.03.2015
34. Nidhi Kalgotra	Ph.D.	08.04.2015
35. Bhawana Gupta	Ph.D.	08.04.2015
36. Bashir Ahmad Dar	Ph.D.	21.05.2015
37. Arti Soni	Ph.D.	01.09.2015
38. Sujata Kundan	Ph.D.	27.10.2015
39. Archana Sharma	Ph.D.	18.12.2015
40. Seema Sahi	Ph.D.	18.12.2015
41. Omkar Singh Chambyal	Ph.D.	18.12.2015
42. Atiya Sayed	Ph.D.	21.01.2016
43. Neerupama	Ph.D.	21.01.2016

b) from other institutions/universities : Nil

40. Number of post graduate students getting financial assistance from the university.

Year	Students getting Financial Assistance		
	M.Sc.	M.Phil.	Ph.D.
2009	04	02	05
2010	04	02	01
2011	04	02	05
2012	04	02	04
2013	04	02	07
2014	04	02	01
2015	04	02	06
2016	04	02	06

41. Was any need assessment exercise undertaken before the development of new programme(s)?
If so, highlight the methodology.

No new programme has been introduced

42. Does the department obtain feedback from

a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes.

b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

The feedback is reviewed in the Departmental Affairs Committee. The suggestions from feedback are discussed with the faculty members.

c. Alumni and employers on the programmes offered and how does the department utilize the feedback?

The Department has already initiated the process to establish an Alumni forum and it is expected to have the Alumni Meet in the month of April 2016.

43. List the distinguished alumni of the department (maximum 10)

- Prof. M.P.S. Ishar, presently Professor in GNDU, Amritsar, Panjab (former Vice-Chancellor University of Jammu).
- Prof. S. Durani, IIT Bombay.
- Prof. Rajive Bhat, School of Biotechnology, JNU, Delhi.
- Dr. Sameer Durani, Scientist F, Department of Atomic Energy, Bangalore.
- Dr. P.C. Kalsi, Scientist H, Baba Atomic Research Centre, Mumbai.
- Mr. Alok Puri, IPS, IGP Vigilance, J&K Police.

- Mr. Anal Gupta, IAS, Secretary, J&K Govt.
 - Dr. Rajesh Thaper, Director, Research Ranbaxy Laboratory, Gurgaon.
 - Mr. Gulzar Singh Slathia, Retired IGP J&K Police.
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts. (w.e.f. 1st June 2009 to 28th February 2015)
- (i) Prof. Sushil K. Pandey delivered an invited talk in CRSI North-Zone meet held on 22-24 September, 2011, in the Department of Chemistry, University of Jammu, in collaboration with IIIM Jammu.
 - (ii) Prof. Sushil K. Pandey delivered an invited talk in Central University Rajasthan in August 2014.
 - (iii) Prof. Sushil K. Pandey delivered an extension lecture as a special resource person in G.C.W. Parade, Jammu, in October 2014.
 - (iv) Prof. Sushil K. Pandey acted as a resource person in Govt. Higher Sec. School, Shastri Nagar, Jammu, in October 2014.
 - (v) Prof. S.K. Pandey delivered an invited talk and chaired a session in an International Conference on Material Science and Technology (ICMTech 2016) on 04.03.2016 at Delhi University, Delhi.
 - (vi) Prof. S.K. Pandey delivered an invited talk in Professor Ram Chand Paul National Symposium on 23.01.2016 at Panjab University, Chandigarh.
 - (vii) Prof. R.K. Bamezai delivered an extension lecture as a special resource person in awareness programme on “Career in Sciences after Graduation” at Govt. Degree College, Akhnoor, on 19.11.2014, which was organized by the Directorate of Life Long Learning, University of Jammu, Jammu.
 - (viii) Prof. R.K. Bamezai acted as resource person for giving a practical demonstration in a workshop as scientific techniques for teaching faculty of science at Govt. College for Women, Parade Ground, Jammu, on May 23, 2015.
 - (ix) Prof. H.N. Sheikh acted as resource person for giving a practical demonstration in a workshop as scientific techniques for teaching faculty of science at Govt. College for Women, Parade Ground, Jammu, on May 22, 2015.
 - (x) Prof. H.N. Sheikh delivered invited lecture at National Symposium on Interdisciplinary Sciences, Govt. G. M. Science College, Jammu (2-3 March, 2012).

- (xi) Prof. Kamal K Kapoor delivered invited lecture at two day UGC sponsored seminar on 'Global Issues on Environment' (September 17-18, 2010), Govt. College for Women, Parade Ground, Jammu – 180 001 (J & K).
- (xii) Prof. Kamal K Kapoor delivered invited lecture at Various schools and colleges of Jammu region for promoting chemical education.
- (xiii) Prof. Kamal K Kapoor delivered invited lecture at Participated in NATIONAL ORGANIC SYMPOSIUM TRUST XIV Organic Chemistry Conference at Cidade De Goa, Goa (December 5-8, 2011).
- (xiv) Prof. Kamal K Kapoor delivered invited lecture at National Symposium on Interdisciplinary Sciences, Govt. G. M. Science College, Jammu (2-3 March, 2012).
- (xv) Prof. Kamal K Kapoor delivered invited lecture at 3rd Biennial International Conference on New Developments in Drug Discovery from Natural Products and Traditional Medicines (DDNPTM-2012). [November 22-24, 2012] NIPER, Mohali (Punjab).
- (xvi) Prof. Kamal K Kapoor delivered invited lecture at Sardar Bhagwan Singh P.G. Institute of Biomedical Sciences & Research, Balawala, Dehradun (December 2012).
- (xvii) Prof. Kamal K Kapoor delivered invited lecture at INSPIRE lectures at University of Jammu (2013) and Central University, Garhwal, Srinagar (Uttarakhand) (2012), IIT, Ropar (May 2013).
- (xviii) Prof. Kamal K Kapoor delivered invited lecture at Lovely Professional University, Phagwara, Punjab 144402 (May 2014).
- (xix) Prof. K.K Kapoor delivered an invited lecture on National Symposium on Transcending Frontiers in Organic Chemistry, National Institute for Interdisciplinary Science and Technology (CSIT-NIIST), Thiruvananthapuram, (October 9-11, 2014).
- (xx) Prof. K.K Kapoor delivered an invited lecture on 51st Annual Convention of Chemists-2014 Kurukshetra University, Kurukshetra, (December 9-12, 2014).
- (xxi) Prof. Kamal K Kapoor delivered invited lecture at National Symposium on 'EMERGING TRENDS IN CHIRALITY, MEDICINAL CHEMISTRY and PERFUMERY', KET's V. G. Vaze College, Mithagar Road, Mulund (E), Mumbai - 400081, India (February , 2015).
- (xxii) Prof. K.K Kapoor delivered an invited lecture on The 14th Indian Science Communication Congress (ISCC-2014): *Communication Strategies for Science Governance*, Indian National Science Academy, New Delhi, (December 25-29, 2015).

- (xxiii) Prof. K.K Kapoor delivered an invited lecture on 5th National Symposium on Advances in Chemical Sciences, GNDU Amritsar (February 2-3, 2016).
- (xxiv) Monika Gupta delivered an invited talk in two days' UGC sponsored National Conference on "Green Chemistry: Newer Challenges and Sustainable Development" held in Udhampur on 3-4th Dec. 2010 (IL-3).
- (xxv) Monika Gupta delivered an invited talk in International Conference "Global Warming: The biggest Challenge of 21st century" sponsored by UGC held in GDC Boys Udhampur on 24-26th Feb. 2012 (IL-6).
45. List the teaching methods adopted by the faculty for different programmes.
Traditional, audio-visual, power point presentation and smart-board.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
By regular assessment in faculty meetings, in Departmental Affairs Committee and in the Departmental Research Committee.
47. Highlight the participation of students and faculty in extension activities. (w.e.f. 1st June 2009 to 28th February 2015)
Students of M.Sc., M.Phil. & Ph.D. participate in Seminars, Quiz Competition, Debates, Sports and Display of Talent. The research scholars were actively and regularly participate in the conferences/seminars/symposia/workshops.
The details of the faculty in extension activities are given in point no. 44
48. Give details of "beyond syllabus scholarly activities" of the department.
- Dr. Ram A. Vishwakarma, Director IIIM Jammu, delivered popular lecture in International Year of Chemistry – 2011, in the Department of Chemistry, University of Jammu, on 27.01.2011.
 - Dr. C.K. Sehgal, Head, IPR, ARCH Pharmed Labs., Mumbai, delivered lecture on "US Patent Law – What is Patentable!" in International Year of Chemistry – 2011, in the Department of Chemistry, University of Jammu, on 14.02.2011.
 - Prof. Vinod K Singh, Director, IISER, Bhopal (on deputation from IITK), delivered popular lecture in International Year of Chemistry – 2011, in the Department of Chemistry, University of Jammu, on 28.02.2011.
 - The Department of Chemistry, University of Jammu, organized a lecture/presentation competition for P.G. students and research scholars on the topic "Chemistry in our lives" on 25.03.2011.

- (v) Prof. Goverdhan Mehta, National Research Professor, University of Hyderabad, Hyderabad, delivered popular lecture on the topic “Celebrating Chemistry for a Better World: Messages and Inspirations” in International Year of Chemistry – 2011, in the Department of Chemistry, University of Jammu, on 16.04.2011.
- (vi) Dr. David A. Harkins, from Lockheed Martin Energy Systems, U.S.A., delivered popular lecture on the topic “Chemical research: power of combined techniques in analysis methods” in International Year of Chemistry – 2011, in the Department of Chemistry, University of Jammu, on 11.07.2011.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

The University of Jammu was accredited by NAAC in the year 2009, with ‘A’ grade.

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

The Department of Chemistry offers Post Graduate Programme in three specializations namely, Inorganic, Organic & Physical Chemistry. In addition, M.Phil. & Ph.D. courses are provided in the diversified areas of research in Chemistry which involves new knowledge of basic and applied Chemistry. The Department has produced 146 Post Graduates, 32 M.Phils and 43 Ph.Ds during 2009 to till date.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strengths

- i. High quality research (as reflected in the list of publications)
- ii. Good number of students being awarded Ph.D/M.Phil every year.
- iii. Good number of students qualifying NET/JRF every year.
- iv. Placement of students more than ninety percent.
- v. The Department is equipped with NMR (400 MHz) Spectrometer in addition to many other sophisticated instruments. Use of NMR Spectrometer is open to other Departments for its optimal utilization.
- vi. The Department has a separate instrumentation laboratory for sophisticated equipments.
- vii. The Department has constituted a Chemical Society for providing latest knowledge to M.Sc., M.Phil. & Ph.D. students.

Weaknesses

- i. Insufficient grant for maintenance of major/minor scientific equipment.

- ii. Grants required for extension of laboratory complex, library and seminar hall.
52. Future plans of the department.
- i. Submission of proposal under SAP Level-II of the UGC for funding for modern instruments and infrastructural facilities in the Department.
 - ii. Procurement of Liquid Nitrogen Plant.
 - iii. Construction of multi-storeyed laboratory complex phase-II.
 - iv. To create facility for single crystal and powder X-ray diffractometer.
 - v. Establishment of modern research laboratories.
 - vi. Upgradation of computer laboratory, library and store.
 - vii. Submission of proposal for seminar hall in the Chemistry Department.

EVALUATIVE REPORT OF THE DEPARTMENT

1. Name of the Department: Department of Geography
2. Year of establishment: 1988
3. Is the Department part of a School/Faculty of the university?
Faculty of Science
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)
PG and Ph.D.
5. Interdisciplinary programmes and departments involved
 - Department is doing interdisciplinary research with Department of Remote Sensing, University of Jammu. Two Ph.D. students of the department have taken co-supervisor from Department of Remote Sensing.
 - Sh. D.S. Raina, Associate Professor in the Department has organized a ten day workshop in collaboration with National Institute of Hydrology in 2013.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
Nil
7. Details of programmes discontinued, if any, with reasons : No programme has been discontinued.
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System Semester and Choice Based Credit System
9. Participation of the department in the courses offered by other departments :
Faculty members are taking classes in the courses offered by IGNOU, Academic Staff College and Department of Remote Sensing & GIS, University of Jammu.

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	1	1	1
Associate Professors	2	1	1
Asst. Professors	4	3	3
Others (Contractual)		1	1

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M.Phil. students guided for the last 4 years
Prof. V.S. Manhas	M.A., M.Phil., Ph.D.	Professor	Geography of Tourism, Regional Development, Regional and Political Geography, Glacial Geomorphology	28	5
Dr. Anuradha Sharma	M.A., Ph.D.	Associate Professor	Resources, Environment and Gender Studies	23	2
Sh. D. S. Raina	M.A., M. Phil	Associate Professor	Social & Cultural Geog., Urban Geography and Historical Geography	20	0
Dr. M. S. Asgher	M.A., M. Phil.	Assistant Professor	Environmental Planning and Management, Resource Evaluation and Management	10	2
Dr. Shashi Prabha	M.A., Ph.D.	Assistant Professor	Agricultural Geog., Resource Management, Rural Development.	15	0
Dr. Inder Jeet Singh	M.A. Ph.D.	Assistant Professor	Agriculture Geography, Environment Geography, Regional Geography and Remote Sensing GIS.	3	0

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

Sr.No	Senior Visiting Fellows	Institute
1	Prof. Abha Lakshmi Singh	Aligarh Muslim University, Aligarh, U.P
2	Prof. M. A. Siddiqui	University of Jamia Millia Islamia, Delhi
3	Prof. Ambadas Javad	University of Mumbai, Maharashtra
4	Prof. K. K. Brar	Panjab University, Chandigarh.
5	Prof. Ravinder Kaur	Panjab University, Chandigarh.
6	Prof. T. A. Kant	University of Kashmir, Jammu & Kashmir
7	Prof. Harjit Singh	Jawaharlal Nehru University, Delhi
8	Prof. K. S. Sohal	Punjabi University, Patiala, Punjab
9	Prof. S. Qureshi	Aligarh Muslim University, Aligarh, U.P
10	Prof (Retd). G. B. Singh	University of Jammu, Jammu.

13. Percentage of classes taken by temporary faculty – programme-wise information 13%

14. Programme-wise Student Teacher Ratio

Programmes	Students Teacher Ratio
M.A.	12:1
Ph.D.	5: 1

15. Number of academic support staff (technical) and administrative staff : sanctioned, filled and actual

Staff	Sanctioned	Filled	Actual
Technical Staff	4	3	3
Administrative Staff	3	2	2
Menial Staff	6	4	4

16. Research thrust areas as recognized by major funding agencies

Sr.No	Thrust Areas
1.	Glaciology and Climate Change
2.	Himalayan Resource Evaluation and Management
3.	Natural Hazards and Management
4.	Agriculture Geography
5.	Urban Geography

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Name of the Faculty Member	Title of the Projects	Funding Agency	Amount (in Rs.)
Prof.M.N.Koul (Retired) and Prof.V.S Manhas	Monitoring of Snow and Glacier of Chumachar Basin/ Drass Basin Ladakh and Mass Balance Studies of Machoi Glacier.(2010-2015).	Space Application Centre Ahmedabad (ISRO), Ahmedabad.	34,55,000/- -
Prof. M.N.Koul (Retired) and Prof.V.S Manhas	Desertification Status Mapping Phase 2 nd of Jammu & Ladakh region .(2010-2015).(2013-2015).	Space Application Centre Ahmedabad (ISRO), Ahmedabad	8,48,000/-
Dr. Shashi Prabha	National Agriculture Policy a Gateway of Poverty Elevation and Sustainable Development a Focus on Jammu Region.	UGC	15,85,000/- -

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration b) International collaboration

Collaboration	No. of Projects	Grants Received
National	3	61,03,000
International	0	0

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; Total grants received. Rs. 58,88,000

20. Research facility / centre with

state recognition

National recognition: Glacier study lab in fiver glass hut at Durung Drung Glacier at Zaskar, Ladakh.

international recognition

21. Special research laboratories sponsored by / created by industry or corporate bodies

Nil

22. Publications:

- * Number of papers published in peer reviewed journals (national /international): 34
- * Monographs - Nil
- * Chapters in Books: 8
- * Edited Books: 1
- * Books with ISBN with details of publishers: 4

23. Details of patents and income generated : Nil
24. Areas of consultancy and income generated : Nil
25. Faculty selected nationally/internationally to visit other laboratories/institutions/ industries in India and abroad
26. Faculty serving in
 - a) National committees b) International committees c) Editorial Boards d) any other : Nil
27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).
28. Student projects : Nil
29. Awards/recognitions received at the national and international level by

Faculty: 4

Doctoral / post doctoral fellows

Students: 1
30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Sr. No.	Conferences/Workshops	Source of Funding
1.	International Conference on Environmental Issues and Sustainable Development, 2013	UGC, ICSSR, J & K Bank, DST
2.	Ten Day Workshop in Collaboration with National Institute of Hydrology on "Climate Change, Cryosphere, Habitat and Changing Livelihood Pattern of Ladakh Region: An Interdisciplinary Approach Towards Developing Adaptive Strategies ",2013.	ICSSR, J&K Bank, National Institute of Hydrology and University of Jammu.

31. Code of ethics for research followed by the departments
 - Citation are taken care of by the supervisor
 - Do not fabricate, falsify, or misrepresent data.
 - Avoid or minimize bias or self-deception.
 - Honor patents, copyrights, and other forms of intellectual property.
 - Do not use unpublished data, methods, or results without permission. Give credit where credit is due.

32. Student profile programme-wise: (June 2009- Feb 2015)

Name of the Programme	Applications received	Selected		Pass Percentage	
M.A./M.Sc. 4 th Sem.		Male	Female	Male	Female
2009-10	624	11	25	91	96
2010-11	600	16	23	100	96
2011-12	554	18	18	100	100
2012-13	361	20	15	95	100
2013-14	248	15	23	Result	Awaited
Ph.D.					
2010	15	2	04		
2011	23	3	...		
2012	17	4	1		
2013	43	14	4		

33. Diversity of students

Name of the Programme	%age of students from the same university	% of students from other universities with in the state	% of students from Universities outside the state	% of students from other countries
M.Sc. Geography	100

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Category	Number of Students
Civil Services and Defense Services	09
NET	32
JRF	12
INSPIRE Fellowship	01
Other	50

35. Student progression

Student Progression	Percentage progression
PG to Ph.D.	
2009-10	Nil
2010-11	15
2011-12	8
2012-13	14
2013-14	51
Ph.D. to Post Doctoral	Nil
Employed <ul style="list-style-type: none"> • Campus Selection • Other than campus recruitment 	11
Entrepreneurs	

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	50
from other universities within the State	0
from universities from other States from	50
universities outside the country	0

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period.

Nil

38. Present details of departmental infrastructural facilities with regard to a) Library

The department has 3000 volumes of different books. It also subscribes 17 Journals, 10 International and 7 National.

b) Internet facilities for staff and students

Department has Wi-Fi internet facility for teachers and research scholars. Broad band internet facility is also provided to the faculty and staff.

c) Total number of class rooms: 2

d) Class rooms with ICT facility : 2

e) Students' laboratories: 2

f) Research laboratories: 1

39. List of doctoral, post-doctoral students and Research Associates a) from the host institution/university (June 2009 to Feb 2015)

1	Rakesh Jasrotia
2	Rajender Singh Charak
3	Mohd. Ashfaq
4	Nazia Raza
5	Ruchi Gupta
6	Tarsem Lal
7	Mohd. Zaman
8	Naved Qazi
9	Verinder Singh
10	Jyoti Sambyal
11	Naved Shabir Qazi
12	Rashi Jamwal

b) from other institutions/universities : Nil

40. Number of post graduate students getting financial assistance from the university.

6 Students

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology : NA

42. Does the department obtain feedback from

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

➤ Yes, Department obtains feedback from faculty members about curriculum and utilizes this feedback in modifying the existing syllabus.

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

c. alumni and employers on the programmes offered and how does the department utilize the feedback?

43. List the distinguished alumni of the department (maximum 10)

Sr.No	Name of the Alumni
1	Mr. Yaseen
2	Mr. Joginder Sambyal
3	Dr. Shashi Prabha
4	Mrs. Sapna Kotwal

5	Mr. Sameer Kotwal
6	Mrs. Deepika Rana
7	Mr. Majhar Khan
8	Mr. Mukhlis
9	Mr. Gaffur
10	Mr. Anwar

44. Give details of student enrichment programmes (special lectures/ workshops/seminar) involving external experts.

Special Lectures	6
Workshops	1
Seminars	0

45. List the teaching methods adopted by the faculty for different programmes.

Teaching Methods adopted by the Faculty	
Theory	Practical
Lecture	Conducting Practical in the Lab
PPT Presentations	Conducting Field Survey (Socio-economic, physical and instrumental)
	Preparation of Field Survey Reports
Assignments	Preparation of dissertation in the last semester
Conducting Seminars in the Class	Organizing all India tour to show Physical and demographic variations in the country
Providing References for further readings	Software and Animations
Use of Internet and Educational Websites	

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

Through tests
Through Assignments
Through evaluations
Through regular assessment in the practical classes
Through seminars in the class
Trough Internal Viva voce
Through External Viva voce

47. Highlight the participation of students and faculty in extension activities.

Participation of Students and Faculty in Extension Activities

Participation of Students and Faculty in Extension Activities		
Sr. No	Faculty	Students
1	Workshops (3)	Workshops (6)
2	Conferences, Seminars and Symposium (49)	Conferences, Seminars and Symposium(11)
3	Summer/Winter Schools (1)	
4	Orientation Courses (2)	
5	Refresher Courses (2)	
6	Training Programmes (3)	
7	Faculty Development Programmes (2)	

Note: Number of a particular extension activity is given in the Bracket

48. Give details of “beyond syllabus scholarly activities” of the department.

Sr.No	Scholarly Activities
1.	Organised an International Conference in 2013
2.	A workshop was organized in 2014
3.	Guest lectures were delivered by Scholars from other universities in the Department.
4.	Two new Projects were taken up by the faculty members.
5.	34 papers and one monograph were published by the Faculty members in the referred journals.
6.	All faculty member have attended 49 National and International Conferences
7.	7 lectures were delivered by the faculty members outside the department

49. State whether the programme/department is accredited/ graded by other agencies? If yes, give details : NA

No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

Department of Geography has been established in 1988, thus, considered as one of the youngest department in northern India. Since 1988 department has made immense contribution in generating new knowledge in physical as well as human geography. It is the only department in the country that has introduced Glacial Geomorphology as one of the courses at post graduate level. As a result lot of research work has been carried out on the glaciers of Jammu and Kashmir State. Apart from Glacier Geomorphology, research has also been carried out in Agriculture Geography, Population Geography, Urban Geography, Bio Geography and

Environment Geography. Department has produced a large number of doctoral thesis since its establishment. In last five years faculty members of the department have published more than 50 research paper in various national and international journals. Furthermore 10 books which cover different fields of research have also been published by the faculty members. At present four research projects funded by DST and UGC are in progress in the department.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Sr. No.	Strengths	Weaknesses	Opportunities	Challenges
1	Resourceful faculty of the department.	Lack of Space	To create academic environment for Geospatial technology.	To manage the quality teaching within limited space.
2	Rich library and other physical infrastructure in progress.		To establish newly added courses for specialization.	To carry out quality research with available infrastructure.
3	Quality students and research scholars.		To introduce diploma course in Remote Sensing and GIS	To meet the extension activities related to guest lectures, seminars, conferences due to non availability of seminar hall
4	Quality teaching by latest methods and field surveys.	Requirement of funds	To take up more projects from National and International agencies related to upcoming areas in research.	Challenge to meet the mentioned strength of quality teaching with existing limited faculty.
5	Quality research in the field of Geomorphology since 1988 and initiation of quality research in the field of, Environment Geography, Cultural Geography, Agriculture Geography and Bio Geography Since 2000	Lack of lab/scientific infrastructure.	There is the opportunity to enhance the quality of class room teaching after creating infrastructure for Geospatial Technology.	Limited office as well as technical staff is also a challenge to meet the mentioned strengths and harness the available opportunities.

52. Future plans of the department.

Sr. No	Future Plans
1	To create academic environment for Remote Sensing and GIS.
2	To create more space in the department to carry out research and other academic activities smoothly.
3	To take up more projects from National and International agencies.
4	To fill the vacant posts of teaching and non teaching staff.
5	To apply for FIST and SAP programs to generate funds for research and infrastructure development.
6.	To introduce diploma course in Remote Sensing and GIS

EVALUATIVE REPORT OF THE DEPARTMENT

1. Name of the Department : Department of Geology
2. Year of establishment : 1956
3. Is the Department part of a School/Faculty of the university? : Faculty of Sciences
4. Name of programmes offered : PG, M.Phil., Ph.D.
5. Interdisciplinary programmes and department involved : Nil
6. Courses in collaboration with other universities, industries, foreign institutions, etc.:
Yes, ENI-Italy, UCL-UK, CNRS-France, ASI-Bhopal, WIHG-Dehradun.
7. Details of programmes discontinued, if any, with reasons : NA
8. Examination System : Choice Based Credit System & Semester System
9. Participation of the department in the courses offered by other departments : NA
10. Number of teaching posts sanctioned, filled and actual (Professors / Associate Professors / Asst. Professors / others)

	Sanctioned	Filled Under Direct Recruitment	Filled Under Career Advancement Scheme	Total
Professor	03	02	04	06
Associate Professors	03	-	-	-
Asst. Professors	07	04	-	04
Contractual	-	-	-	02

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance.

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of M.Phil/Ph.D students guided
Dr. R.K. Ganjoo	M.Sc. Ph.D.	Professor & Head	Quaternary Geomorphology, Climate Change Science & Glaciology	25 yrs	Ph.D.=Nil M.Phil=Nil
Dr. M.A. Malik	M.Sc. Ph.D.	Professor	Micropaleontology & Biostratigraphy	27 yrs	Ph.D.=Nil M.Phil=Nil
Dr. G.M. Bhat	M.Sc. M.Phil. Ph.D.	Professor	Sedimentology, Structural Geology & Engineering Geology	28 yrs	Ph.D.=02 M.Phil=01
Dr. P.K. Srivastava	M.Sc. Ph.D.	Professor	Economic Geology & Mineral Exploration	20 yrs	Ph.D.=01 M.Phil=02
Dr. A.S. Jasrotia	M.Sc. Ph.D.	Professor	Remote Sensing & GIS	20yrs	Ph.D.=02 M.Phil=Nil
Dr. S.K. Pandita	M.Sc. Ph.D.	Professor	Sedimentology & Disaster Management	20 yrs	Ph.D.= 01 M.Phil=01

Dr. Varun Parmar	M.Sc. Ph.D.	Assistant Professor	Vertebrate Paleontology	10 yrs	Ph.D.=01 M.Phil=01
Dr. Som Nath	M.Sc. M.Phil, Ph.D.	Assistant Professor	Sedimentology & Paleontology	7 yrs	nil
Dr. Yudhbir Singh	M.Sc., Ph.D.	Assistant Professor	Engineering Geology	4 yrs	Nil
Dr. Rajwant	M.Sc., Ph.D.	Assistant Professor	Quaternary Geology	4 yrs	Nil

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors.

Visiting Fellows:

Prof. R.V Karanth, IIT Powai, Mumbai, Feb 23-25, 2011

Prof. A.M Bhola, University of Delhi, Jan 13-16, 2012

Prof. Rajiv Patnaik, Punjab University, Chandigarh, July 4, 2013

Prof. A.M Bhola, University of Delhi, July 30, 2013

Prof. Naresh Kochher, PU Chandigarh, Sep. 3, 2013

Prof. D.A Sant, MSU Baroda, Vadodra, Jan. 12-15, 2014

Prof. Santosh Kumar, Kamaun University, Nainital, Feb. 11-13, 2014

Prof. Biswajit Mishra, IIT Kharagpur, Feb. 16-19, 2014

Prof. T.N. Singh, IIT Powai, Mumbai, Feb. 24-25, 2014

Prof. G.S. Gill PU Chandigarh, May 8, 2014

Prof A.K Sen IIT Roorkee UK, June 23, 2014

13. Percentage of classes taken by temporary faculty – programme-wise information.:

20% - Courses - Metamorphic Petrology, Hydrogeology, Fundamentals of Geology, Natural Hazards

14. Programme-wise Student Teacher Ratio

Teacher: Student Ratio

1:7

- 15 Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Category	Number of Permanent Employees sanctioned	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	07	04	nil	01(orderly)
Technical Staff	08	03	nil	

- 16 Research thrust areas as recognized by major funding agencies

THRUST AREA I

Biostratigraphy and Sedimentology

Late Precambrian - Palaeozoic Biostratigraphy, faunal events and provincialism of the Higher Himalaya, Mesozoic vertebrate evolution, biodiversity, faunal dispersal events and palaeobiogeography of India, Palaeopedology, provenance, & palaeoenvironment of Tertiary deposits of Jammu region, Basin analysis, microfacies, palaeogeography of late Palaeozoic and early Mesozoic strata of Kashmir Himalaya, Neogene-Quaternary Biostratigraphy, geomorphology, and palaeoclimatology.

THRUST AREA II

Mineral Exploration, Landslide Hazard Zonation and Groundwater Exploration

Genesis and physiochemical aspects of gold / base metal / rare metals / magnesite mineralization

Application of Remote Sensing and GIS for regional mapping, landslide hazard zonation, evaluation of potential groundwater zones, base metal mineralization, watershed management

Geotechnical and geoenvironmental evaluation of landslides along the National Highway 1A between Batote and Banihal, Jammu and Kashmir

17. Number of faculty with ongoing projects from

- a) National : **10**
- b) International funding agencies and : **01**
- c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. (w.e.f June 2009 to June 2014)

Faculty Member	Agencies	No. of projects awarded	Funds approved	Title of the Project
R.K. Ganjoo	DST	01	355.00 lacs	Himalayan Cryosphere: Science and Society
G.M. Bhat & Yudhbir Singh	MOES	04	153.284 lacs 37.12 lacs 102.04 lacs 151.768lacs	Crustal deformation and active fault mapping in J&K region Seismotectonic analysis of the Jammu region & adjoining areas, J&K state Setting up of additional seismological observatories with V-Sat networking in Jammu Seismic hazards assessment in the Kashmir Himalaya using Geological, seismological & geodetic data.
G.M. Bhat , S.K. Pandita & Yudhbir Singh	MOES	01	193.1384	Seism tectonic analysis of Jammu region & its adjoining areas.
P.K. Srivastava	UGC	01	12.0 lacs	Pb-Zn mineralization in Reasi inliar: Fluid Exosoution and origin.
A.S. Jasrotia	State Rural Develop-ment Deptt.	01	26 lacs	State persceptives and strategic plan for watershed development in J&K state.
S.K. Pandita & Yudhbir Singh	MOES	01	47.618lacs	Active fault study around Kishtwar area, J&K
Varun Parmar	DST	01	12.3073lacs	Contential Jurassic Vertebrate fauna of India: Biodiversity, Evolution and Intercontinental affinities.
Som Nath	DST UGC	02	13.41 lacs 6.0lacs	Biochronology and Depositional Environment of the Upper Siwalik subgroup of Jammu Proboscidean fauna from the Upper Siwalik Subgroup of Jammu, J&K, India.
Rajwant	DST	01	23.96 lacs	Tectonic geomorphology and Cainozoic morphotectonic evolution of Dharamsala-Rampur area of Kangra Valley in HP.

18. Inter-institutional collaborative projects and associated grants received (w.e.f June 2009 to June 2014)
- a) National collaboration Yes
- b) International collaboration Yes
19. Departmental projects funded by DST-FIST; UGC-SAP / CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. 10.69 Crore
20. Research facility / centre with
- State recognition Nil
 - National recognition Nil
 - International recognition Nil
21. Special research laboratories sponsored by / created by industry or corporate bodies.: Nil
22. Publications: (w.e.f June 2009 to June 2014) Annexure I
- Number of papers published in peer reviewed journals (national / international) : 113
 - Monographs : 01
 - Chapters in Books
 - Books/Books with ISBN with details of publishers : 35
 - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International complete, Dare Database – International Social Sciences Directory, EBSCO host, etc.)
 - Citation Index – range / average
 - Impact Factor – range / average 0.314 – 8.235

Name	Documents in Scopus	Citations	H index
Prof. M.A. Malik	5	23	3
Prof. G.M. Bhat	31	41	5
Prof. R.K. Ganjoo	14	50	4
Prof. P.K. Srivastava	-	-	-
Prof. A.S. Jasrotia	-	-	-
Prof. S.K. Pandita	13	10	2
Dr. Varun Parmar	8	31	3
Dr. Som Nath Kundal	2	7	1
Dr. Yudhbir Singh	-	-	-
Dr. Rajwant	01	-	-

Research Publications

Books:

- 2012 Geology and Hydrocarbon Potential of Neoproterozoic-Cambrian Basins in Asia
GM Bhat, J Craig, J Thurow, B Thusu, A Cozzi Geological Society London 366, 1-304
- 2012 Siwalik Boulder Conglomerates: Sedimentation and Tectonics. A publication of Lambert
Academic Publishing, Germany. (S. K. Pandita, S. S. Kotwal and G. M. Bhat)
- 2011 Landslide Investigation: Morphometric and Geotechnical Approach, A Case Study from North-
west Himalaya, India Y Sigh, GM Bhat, SK Pandita LAP Lambert, Germany, 1-103
- 2009 Geoenvironment: Challenges Ahead. A publication of McMillan India.
(Editors G.M. Bhat, S. K. Pandita, Yudhbir Singh and B. A. Lone)

Research Papers:

M.A. Malik

- 1 Shortening rate and Holocene surface rupture on the Riasi thrust in the Kashmir Himalaya:
Active thrusting within the Northwest Himalayan orogenic wedge, Gavillot, Y., A.M. Meigs,
D. Yule, A.H. Hebel, C. Madden, T. Ritteneour M.A. Malik 2015 GSA Bulletin, B31281
In review
2. Varun Parmar, G.V.R. Prasad, Jayoti Kumar, M.A. Malik, Rigzin Norboo Cricetid rodents
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Palaeoworld PALWOR-273; No. of Pages 12 (2015), [http://dx.doi.org/10.1016/
j.palwor.2014.12.002](http://dx.doi.org/10.1016/j.palwor.2014.12.002)
3. R.Vassallo, J.-L.Mugnier, V.Vignon, M.A.Malik, R.Jayangondaperumal, P.Srivastava,
F.Jouanne, J.Carcaillet. Distribution of the Late-Quaternary deformation in Northwestern Himalaya
Earth and Planetary Science Letters 411 (2015) 1–12
4. Gavillot Yann, Meigs, Andrew, Malik, M., And Yule, D Late Cenozoic – Recent Exhu-
mation History Of The Kashmir Himalaya From The Siwalik-Murree Belt To The High
Himalaya Using (U-Th/He) Thermochronometry 2014 GSA Annual Meeting in Vancouver,
British Columbia (19–22 October 2014) Geological Society of America *Abstracts with
Programs*. Vol. 46, No. 6, Paper No. 66-4
5. Yann Gavillot, Andrew Meigs, J Douglas Yule, Tammy Rittenour and Manzoor Malik
Neotectonics and structure of the Himalayan deformation front in the Kashmir Himalaya,
India: Implication in defining what controls a blind thrust front in an active fold-thrust belt AGU
fall meeting San Francisco 15-19 December 2014
6. Riccardo Vassallo, Jean-Louis Mugnier, Hervé Jomard, Manzoor Malik, François Jouanne,
Jean-François Buoncristiani, Ramperu Jayangondaperumal North-Western Himalayan active
front: what paleoseismology tells us about very large thrusts. 4th International INQUA Meeting
on Paleoseismology, Active Tectonics and Archeoseismology, Aachen; 10/2013

7. Trivedi, A. Chauhan, M.S., Malik M.A 2013 Holocene Vegetation and climate change in Jammu region based on Pollen evidence from lake deposits. *Man and Environment* XXXVII(1) 74-89
8. Gavillot, Y., A.M. Meigs and D.F. Stockli, and M. Malik 2013 Late Cenozoic exhumation and timing of deformation front of the Kashmir Himalayas from (U-Th/He) Thermochronometry American Geophysical Union Fall Meeting, 9-13 December 2013 abstract
9. R. Vassallo, J.L. Mugnier, R.J. Perumal. P. Srivastava M.A. Malik, M. Mouchene and F. Jouanne. A future big one in the North- West Himalayan syntax ? *Geophysical Research Abstracts*. 14 EGU 2012- 10839,
10. Meigs A., C. Madden, J.D. Yule, Y. Gavillot, A. Hebel, A. Hussain, M. I. Bhat, A. B. Kausar, M. Malik, S. Ramzan, M. Sayab, and R. Yeats 2012 Pattern, rate, and timing of surface rupturing earthquakes across the northwest Himalaya. *Journal of Himalayan Earth Sciences*, v. 45, 2, pp 111-114
11. Das B.K., Gaye B., Malik M.A. 2010 Biochemistry and Palaeoclimate variability during Holocene – a record from Mansar lake, Lesser Himalaya. *Environ.Earth Sci.* 61.565-574
12. V. Vignon J. L. Mugnier A. Replumaz R. Vassallo R. Ramakrishnan P. Srivastava M. A. Malik F. Jouanne J. Carcaillet Active tectonic of the Medlicott Wadia Thrust (Western Himalaya) inferred from morphotectonic analysis AGU Fall Meeting Abstracts 12/2010;
13. Meigs, A., Madden, C., Yule, J.D., Gavillot, Y., Hebel, A., Hussain, A., Bhat, M.I., Kaussar, A.B., Malik, M., Ramzan, S., Sayab, M. and Yeats, R., 2010, Distributed deformation, distributed earthquakes in the northwest Himalaya, in Leech, M.L., and others, eds., *Proceedings for the 25th Himalaya-Karakoram-Tibet Workshop: U.S. Geological Survey, Open-File Report 2010-1099*,
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16. V. Vignon, J. Mugnier, A. Replumaz, R. Vassallo, J. Perumal, M. Malik. Emergence of the Main Himalayan Thrust and Seismic Ruptures in Kashmir. *European Seismological 32 General Assembly Abs. Vol. p. 74* Sept. 6-10 2010. Montpellier, France
17. Andrew_Meigs, C. Madden, J.D. Yule, Y. Gavillot, A. Hebel, A. Hussain, M. I. Bhat, A. B. Kausar, M.A. Malik, S. Ramzan, M. Sayab, and R. Yeats Distributed deformation, distributed earthquakes in the Northwest Himalaya Karakoram Himalaya Tibet workshop at California June 4-8, 2010

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- 10 Geology and hydrocarbon potential of Neoproterozoic–Cambrian Basins in Asia: an introduction GM Bhat, J Craig, M Hafiz, N Hakhoo, JW Thurow, B Thusu, A Cozzi *Geological Society, London, Special Publications* 366 (1), 1-17 (2012)
- 11 Geotechnical Investigation of Landslide at Sangaldan near Tunnel -47, on Katra-Qazigund Railway Track, Jammu and Kashmir Y Singh, V Sharma, SK Pandita, GM Bhat, K Thakur, Sham Singh *Geological Society of India* (August 2013)
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- 14 Temporal Facies and Diagenetic Evolution of the Mixed Siliciclastic-Carbonate Jajiya Member (Callovian-Oxfordian), Jaisalmer Formation, West India GM Bhat, AHM Ahmed *Jurassica* (published December 2013)
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- 16 Hot Springs and the Geothermal Energy Potential of Jammu and Kashmir State, Northwest Himalaya J Craig, A Absar, GM Bhat, G Cadel, B Thusu *Earth Science Reviews*, 126, 156-177 (2013)
- 17 Petrogenesis of the flood basalts from the Early Permian Panjal Traps, Kashmir, India: geochemical evidence for shallow melting and rifting of the Gondwana margin JG Shellnutt, GM Bhat, KL Wang, ME Brookfield, BM Jahn, J Dostal *Journal of Lithos* (2014)
- 18 Lithofacies association and depositional history of Boulder Conglomerate Formation, Upper Siwalik Subgroup, Jammu Himalaya S.K. PANDITA*, SHAM S. KOTWAL, KULDEEP K. THAKUR, G.M. BHAT, YUDHBIR SINGH *Himalayan Geology*, Vol. 35 (2), 2014, pp. 135-145, Printed in India
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- 20 Estimation of source parameters of local earthquakes in Jammu and Kashmir, India, *International Journal of Scientific and Research Publications* GM Bhat, SK Pandita, Y Singh, S Sharma *International Journal of Scientific and Research Publications* 3 (2), 1-5 (2014)
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R. K. Ganjoo

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9. Bhat, G. M., Pandita, S. K., Singh, Yudhbir, Sharma, Sandeep, (2013). Estimation of Source Parameters of Local Earthquakes in Jammu and Kashmir, India: *International Journal of Scientific and Research Publication* Vol.3(2), p1-5.
10. Pandita, S. K. Bhat, Sunil, K. Kotwal, Sham S., Singh, Yudhbir and Thakur, Kuldeep, K. (2013). Provenance and Tectonic settings of the Lower Siwalik Subgroup, Jammu, Northwest Himalaya: *Journal of Palaeobotanist* Vol. 63, p17-23.
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13. Singh, Yudhbir Sharma, Vinay, Pandita, S. K. Bhat, G. M., Thakur, Kuldeep, K & Kotwal Sham, S. (2014). Investigation of landslide at Sangaldan near tunnel-47, on Katra- Qazigund railway track, Jammu and Kashmir: *Journal of Geological Society of India*. Vol. 84(6), p 686-692
14. Hussain, G., Singh, Y. and Bhat, G.M. (2015) Geotechnical Investigation of Slopes along the National Highway (NH-1D) from Kargil to Leh, Jammu and Kashmir (India). *Geomaterials*, Vol. 5(2), p 56-67, doi: [10.4236/gm.2015.52006](https://doi.org/10.4236/gm.2015.52006)

Rajwant

1. Rajwant and Sharma, U.K. (2012). Evaluation of Geologic, Geomorphic, Morphometric and Anthropogenic parameters to study vulnerability towards erosional processes: A Case Study of Baner Khad Watershed, Himachal Pradesh, India. *In Proceedings GEOS Conference*.
23. Details of patents and income generated : Nil
24. Areas of consultancy and income generated : Nil
25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad : Nil
26. Faculty serving in (w.e.f June 2009 to June 2014)
 - a) National Committees : Curriculum Committee, Sikkim University, UPSC
 - b) International Committees : Editorial Committee Geological Society, London
 - c) Editorial Boards – Contributing Editor *Eternal India*

S.K. Pandita : Guest Editor, Journal Indian Association of Sedimentologists (2011-12)

G.M. Bhat: Editorial Manager, Journal of Environmental Earth Science (2014) Books Editorial Committee (BEC) for a Society Books Advisor, Geological Society of London (2014-17)

Guest Editor, Indian Journal of Geomorphology

Guest Editor, Indian Association of Sedimentologists

Editorial Journal of Environmental Earth Science

Member, Books Editorial Committee Geological Society of London

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs). (w.e.f June 2009 to June 2014) : 06

a) General Orientation Course attended :

Dr. Yudhbir Singh (27.1.2012 to 27.2.2012), ASC, University of Jammu.

Dr. Rajwant (27.1.2012 to 27.2.2012), ASC, University of Jammu.

b) Refresher Course Attended :

Dr. Yudhbir Singh (8.2.2014 to 28.2.2014), ASC, University of Jammu.

Dr. Rajwant (23.2.2015 to 16.3.2015), ASC, University of Jammu.

c) Training Course Attended :

Dr. Som Nath (23.7.2012 to 27.7.2012), Recent Trend in Petroleum Exploration, ONGC, Dehradun.

Dr. Som Nath (10.12.2014 to 27.7.2015), Bi process Engineering School of Biotechnology, University of Jammu.

28. Student projects : Nil

a. Percentage of students who have done in-house projects including inter-departmental projects : Not part of the curricula

b. Percentage of students doing projects in collaboration with other universities / industry / institute

29. Awards / recognitions received at the national and international level by (June 2009 to June 2014)

• Faculty : 05

• Doctoral / post doctoral fellows : NA

• Students : 04

30. Seminars / Conferences / Workshops organized and the source of funding (national / international) with details of outstanding participants, if any. : 23
31. Code of ethics for research followed by the departments : The research projects are deliberated in the meetings of DRC where the objectives and methodology of the project is thoroughly scrutinized and wherever necessary amendments are made in consultation with P.I.
32. Student profile programme-wise

Name of the Programme	Applications received					Selected		Pass percentage	
						Male	Female	Male	Female
	2009-10	2010-11	2011-12	2012-13	2013-14				
P.G.	99	92	94	91	78	176	32	-	-
M.Phil.	-	-	1	4	5	7	3	100%	100%
Ph.D.	1	3	-	3	12	8	3	100%	100%

33. Diversity of students (June 2009 to June 2014)

Name of the Programme	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
P.G.	96%	4%	nil	nil
M.Phil.	98%	2%	nil	nil
Ph.D.	96%	2%	2%	nil

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise. (June 2009 to June 2014)

Students have cleared	2009-2014
Civil services	Nil
Defence services	01
Net/Set/Gate	30
Others*	110

*(GSI, JKPDC, CVPP, ONGC, Higher Education, Non-gazetted, Semi Govt./Private Companies)

35. Student progression (June 2009 to June 2014)

Student progression	Percentage against enrolled
UG to PG	NA
PG to M.Phil.	10
PG to Ph.D.	19
Ph.D. to Post-Doctoral	Nil
Employed <ul style="list-style-type: none"> Campus selection Other than campus recruitment 	NA
Entrepreneurs	—

36. Diversity of staff

Percentage of faculty who are graduates	
Of the same university	50%
from other universities within the State	20%
from universities form other States	30%
from universities outside the country	0%

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period : Nil

38. Present details of departmental infrastructural facilities with regard to

- Library : Yes, the department has a good library with about 6400 books/journals/magazines.
- Internet facilities for staff and students : Yes, all faculty chambers are connected with internet and Wi-Fi connections
- Total number of class rooms : Two
- Class rooms with ICT facility : One
- Students' laboratories : Three
- Research laboratories : Nil

39. List of doctoral, post-doctoral students and Research Associates (June 2009 to June 2014)

- from the host institution/ university : Nil

- b) from other institutions/ universities : Nil
40. Number of post graduate students getting financial assistance from the university. Nil
41. Was any need assessment exercise under taken before the development of new programme(s)? if so, highlight the methodology. : NA
42. Does the department obtain feedback from
- a) faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
- The curriculum is discussed in the faculty meetings at regular interval to seek feedback for necessary upgradations in the curricula. As per the statutes, the curricula is regularly upgraded and modified after every three years.
- b) students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
- The practice of inviting feedback from students is in the process of being reintroduced formally after the approval of the statutory bodies.
- c) alumni and employers on the programmes offered and how does the department utilize the feedback?
- The Alumni Association holds meetings to discuss emerging trends in the subjects and provides input to the department for modernization and upgradation.
43. List the distinguished alumni of the department (maximum 10)
- Sh. B.D.Thapa, DDG, GSI
- Dr. Bindraban Thusu, UCL
- Sh. Bharat Bhushan, DDG, GSI
- Sh. S.S.Wazir, DIG, J&K Police
- Sh. B K Raina, Director, GSI
- Sh. Tayab Ali, Ex. DG, GSP
- Sh. M.S. Pandit, Finance Commissioner, J&K
- Dr. Ajay Sapru, Schlumberge
- Dr. C.P. Vohra, Ex. DG, GSI
- Sh. S.V. Sondhe, Ex. DG, GSI
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts. (June 2009 to June 2014) 10 lectures
1. Prof. Santosh Kumar, Kamaun University, Nainital (Feb. 11-13, 2014)

2. Prof. Viswajit Mishra (Feb. 16-19, 2014)
3. Prof. R.V. Karanth, IIT, Powai, Mumbai (Feb. 23-25, 2011)
4. Prof. A.M. Bholla, University of Delhi (Jan. 13-16, 2012) 30.07.2013
5. Prof. Rajiv Patnaik, Punjab University, Chandigarh (4.7.2013)
6. Prof. DA Sant, M.S. University, Baroda (Jan. 12-15, 2014)
7. Prof. T.N. Singh, IIT, Powai, Mumbai (Feb. 24-25, 2014)
8. Prof. G.S. Gill, Punjab University, Chandigarh (8.5.2014)
9. Prof. Naresh Kochhar, Punjab University, Chandigarh (3.9.2013)
10. Prof. A.K. Sen, IIT, Roorkee (23.06.2014)
45. List the teaching methods adopted by the faculty for different programmes:
Power Point Presentation, White Board, through Models New Reports, Journal, Textbooks etc., regular field work/visits.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? Nil
47. Highlight the participation of students and faculty in extension activities. (June 2009 to June 2014) Nil
48. Give details of “beyond syllabus scholarly activities” of the department :
Visits to field areas of geological interest.
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. No
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
Strengths
 - a) Well equipped laboratories.
 - b) Actively engaged in research through various national funded research projects.
 - c) Research publication in peer reviewed international and national journals with impact factor.
 - d) Research Collaborations with national and international scientific institutions/ centres.

- e) Specialization in emerging fields of geology such as seismology, ore geology, climatology, geohazards.

Weakness

- a) Space constraints for class, library as well as additional research laboratories to accommodate upcoming new scientific instruments and books/journals.
- b) With growing number of scholars there is lack of space to accommodate the scholars with individual reading space.
- c) Lack of adequate grant to maintain the equipments.

Opportunities

- a) The Department has regularly introduced new courses in teaching and research such as seismology, glaciology, climate change, morphotectonics, geology, mineral exploration etc. to provide opportunity to students to cope with new knowledge in the field of geology.
- b) The post-graduate students are regularly exposed to field knowledge of geology visits to field areas of geological interests and visits to industries related with geo-activities.

52. Future plans of the department.

In view of the rapid development in the field of Geology, the department regularly introduces new applied courses from time to time to equip the students with latest techniques

EVALUATIVE REPORT OF THE DEPARTMENT

1. Name of the Department : Remote Sensing and GIS
2. Year of establishment : 2008
3. Is the Department part of a School/Faculty of the University: Faculty of Sciences
4. Name of programmes offered : P.G., Ph.D
5. Interdisciplinary programmes and departments involved: Yes, Post graduate programme is an interdisciplinary programmewithScienceDepartmentsbeinginvolved.
6. Courses in collaboration with other universities, industries, foreign institutions, etc: No
7. Details of programmes discontinued, if any, with reasons : No, programme has been discontinued.
8. Examination System : Choice Based Credit System
9. Participation of the department in the courses offered by other departments: Yes
10. Number of teaching posts sanctioned, filled and actual (Professors/ Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professors	-	-	
Associate Professors	-	-	
Asstt. Professors	02	Nil (Advertised)	
others			

11. Facultyprofilewithname,qualifications,designation,areaofspecialization,experienceandresearch underguidance

Name	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D/M.Phil students guided for the last 4 years
Prof. A.S.Jasrotia	M.Sc., Ph.D PG Diploma in RS &GIS	Head	Remote Sensing application in Geosciences	19 years	3

12. List of Senior Visiting Fellows, adjunct faculty, emeritus professors
13. Percentage of classes taken by temporary faculty- programme-wise information M.Sc. - 60%

14. Programme-wise student teacher ratio
M.Sc. 1:12
Ph.D 1: 4
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual: Contractual Staff
16. Research thrust areas as recognized by major funding agencies:
17. Number of faculty with ongoing projects from a national b) international funding agencies and c) Total grants received. Give the names of the funding agencies/project title and grants received project-wise. (w.e.f June 2009 to June 2014). **Nil**
18. Inter-institutional collaborative projects and associated grants received (w.e.f June 2009 to June 2014).
a) National collaboration b) International collaboration **Nil**
19. Departmental projects funded by DST-FIST; UGS-SAP/ CAS, DPE; DBT, ICSSR, AICTE, etc; total grants received. **Nil**
20. Research facility / centre with
 - State recognition
 - National recognition
 - International recognition**Nil**
21. Special research laboratories sponsored by/ created by industry or corporate bodies :
Sponsored by Deptt. of Space, Govt of India
ISRO, HO, Bangalore
22. Publication: (w.e.f June 2009 to June 2014).
 - Number of papers published in peer reviewed journals (national / international) 27
 - Monographs
 - Chapters in Books
 - Edited Books
 - Books with ISBN with details of publishers
 - Number listed in International Database (Fore.g. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host, etc)
 - Citation index-range/average

- SNIP
 - SJR
 - ImpactFactor-range/average
 - h-Index
23. Details of patents and income generated (w.e.f June 2009 to June 2014). **Nil**
24. Areas of consultancy and income generated (w.e.f June 2009 to June 2014). **Nil**
25. Faculty selected nationally/internationally to visit other laboratories/institutions/industries in India and abroad (w.e.f June 2009 to June 2014). **Nil**
26. Faculty serving in (w.e.f June 2009 to June 2014).
- | | |
|------------------------|---|
| a) National committees | b) International committees |
| c) Editorial Boards | d) any others (please specify) Nil |
27. Faculty recharging strategies (UGC, ASC, Refreshers/orientation programs, workshops, training programs and similar programs (w.e.f June 2009 to June 2014). **Nil**
28. Students projects (w.e.f June 2009 to June 2014)
- Percentage of students who have done in-house projects including inter-department projects: 75% (31 students)
 - Percentage of students doing projects in collaboration with other universities / industry / institute : 25% (11 students)
29. Awards / recognition received at the national and international level by
- | | | |
|--|---|------------|
| <ul style="list-style-type: none"> • Faculty • Doctoral/ post doctoral fellows • Students | } | Nil |
|--|---|------------|
30. Seminars / Conferences / workshops organized and the source of funding (national / international) with details of outstanding participations, if any. (w.e.f June 2009 to June 2014):
- ❖ Organized one day Seminar on “Digital Data Base Information on Socio- Economic and Natural Resources” on 10th November, 2010.
 - ❖ Organized 21 days “Winter School Training Programme for Capacity Building in Geospatial Technologies” under NRDMS (DST) Programme, Ministry of Science and Technology, Govt. of India, New Delhi w.e.f 25th Feb - 17th March, 2014 for University and College teachers.
31. Code of ethics for research followed by the departments.

32. Students profile programme-wise (w.e.f June 2009 to June 2014).

Name of the programme	Application received	Selected		Pass percentage	
		Male	Female	Male	Female
M.Sc	51 (2009)	07	05	58%	42%
	32 (2010)	06	04	60%	40%
	09 (2011)	01	02	33%	67%
	13 (2012)	03	01	75%	25%
	13 (2013)	04	01	80%	20%
	24 (2014)	08	04	67%	33%
Ph.D	08 (2014-15)	01	03	25%	75%

33. Diversity of students (w.e.f June 2009 to June 2014)

Name of the programme	% of students from the same university	% of students from other universities within the state	% of students from universities outside the state	% of students from other countries
M.Sc.	(2009) 100%	-	-	-
	(2010) 90%	-	10%	-
	(2011) 67%	-	33%	-
	(2012) 100%	-	-	-
	(2013) 75%	25%	-	-
	(2014) 75%	-	25%	-
Ph.D	(2014) 75%	-	25%	-

34. How many students have cleared Civil Services and Defence Services examinations NET, SET, GATE and other competitive examinations? Give details category-wise (w.e.f June 2009 to June 2014).

35. Student progression (w.e.f June 2009 to June 2014).

Students progression	Percentage against enrolled
UG to PG	(2009) 100% (2010) 90% (2011) 100% (2012) 75% (2013) 100% (2014) 83%
PG to M.Phil	
PG to Ph.D	(2014) 100%
Ph.D to Post-Doctoral	
Employed	
• Campus selection	
• Other than campus recruitment	
Entrepreneurs	

36. Diversity of staff

Percentage of faculty who are graduate	
of the same university	80%
From other universities within the state	10%
From universities from other states	10%
From universities outside the country	-

37. Number of faculty who were awarded M.Phil, Ph.D, D.Sc. and D.Litt during the assessment period (w.e.f June 2009 to June 2014).

38. Present details of departmental infrastructure facilities with regard to

- a) Library : Books
- b) Internet facility for staff and students : Available
- c) Total number of class rooms : Two
- d) Class rooms with ICT facility : Available
- e) Students laboratories : One
- f) Research laboratories : nil

39. List of doctoral, post-doctoral students and Research Associates (w.e.f June 2009 to June 2014).

- a) from the host institution/university
- b) from other institutions/universities

40. Number of post graduate students getting financial assistance from the university.

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

42. Does the department obtain feedback from

- a. Faculty on curriculum as well as teaching-learning evaluation? If yes, how does the department utilize the feedback?
- b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
- c. alumni and employers on the programmes offered and how does the department utilize the feedback?

43. List the distinguished alumni of the department (maximum 10)

44. Give details of student enrichment programmes (w.e.f June 2009 to June 2014).

Special Lectures

Dr. Milap Punia (w.e.f 23-4-09 to 26-4-09)

Prof Surya Kant (w.e.f 4-5-09 to 7-5-09)

Prof. M.S Nathawat (w.e.f 8-5-09 to 11-5-09)
 Mr. Gyanendra Singh Sisodia (w.e.f 23-5-09 to 24-05-09)
 Dr. Y.S Rao (w.e.f 18-5-09 to 21-5-09)
 Dr. R.D Garg (w.e.f 15-5-09 to 17-5-09)
 Dr. V.S Rathore (w.e.f 22-11-09 to 26-11-09)
 Dr. Jatindera Prasad (w.e.f 8-12-09 to 9-12-09)
 Dr. D.N.Pant (w.e.f 10-12-09 to 15-12-09)
 Dr. D.N.Pant (w.e.f 5-3-10 to 9-3-10)
 Mr. Praveen K. Thakur (w.e.f 15-5-10 to 16-5-10)
 Dr. D.N.Pant (w.e.f 1-2-11 to 5-2-11)
 Prof. J.S Rawat (w.e.f 26-7-11 to 20-7-11)
 Dr. D.N.Pant (w.e.f 1-8-11 to 5-8-11)
 Dr. D.N.Pant (w.e.f 16-2-12 to 18-2-12)
 Dr. D.N.Pant (w.e.f 16-1-13 to 18-1-13)

45. List the teaching methods adopted by the faculty for different programmes.
 ICT teaching (through LCD project, offline and online teaching also)
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored: Through student's presentation
47. Highlight the participation of students and faculty in extension activities.
 Students and faculties are involved in various activities of Department and Universities also.
48. Give details of: "beyond syllabus scholarly activities" of the department.
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

The Remote Sensing and GIS technique is of great significance in different fields like assessment of geological hazards, mineral and oil exploration, hydrogeology, watershed management, earthquake engineering, telecom, tourism, transport and navigation system, land use analysis, modelling urban environment, crop monitoring, disaster management, environmental studies, bio-diversity etc. This course provides the foundation for awakening the student understands of Remote Sensing and GIS as well as strengthening their software knowledge and problem solving skills. Scope of the course cover such topics as GIS database building, geocoding, image analysis, Global Positioning Systems, spatial analysis, and surface analysis. The course is especially useful for tracking information from

inaccessible region due to difficult geographical terrain, problem of insurgency in state of J&K where seeking information through human resources becomes difficult.

51. Detail five major strengths, weaknesses, opportunities and challenges (SWOC)

The growth of Remote Sensing and GIS in industry saw its inception around three decades ago. A broad chronology of the movement of this emerging science field may be visualized in four phases. At all phases the movement remained linked to development in academia as well as industry-anyone following the other.

The first is introduction and application of GIS in few researches in multiple academic disciplines/ professional courses as Forestry (green cover estimation), Geology (mineral maps), Agriculture (crop disease estimation), Civil engineering, etc.

The second is the utilization of Remote Sensing and GIS techniques in various projects on disaster management, urban planning, etc. of which digital spatial database development was a part.

The third is roughly eight years old, is the one when Indian ITES/BPO industry came up on strong footing. This was together with the growth of country's IT industry.

The fourth is the contemporary phase, as we call it, is the one when companies entered in the business of customization and development.

52. Future plans of the department

- To understand the principles, applications, trends and pertinent issues of Geographical information systems and sciences, including Remote Sensing (RS), Photogrammetry, Cartography and Global Positioning Systems (GPS).
- To provide learning and teaching experiences with real world problems.
- To develop technical skills and competence in: data and information acquisition, extraction, management and analysis; spatial and statistical modeling; mapping and visualization.
- To increase awareness of GIS and modeling tools for improving competition and business potential.
- To describe how geographical information is used, managed and marketed globally.
- To gain an understanding of how to manipulate and apply vector and raster spatial data, particularly with regard to local/state/national issues, emphasizing lands in and near it.
- To develop applications of environmental Remote Sensing and GIS which can directly enhance service delivery on land use management, ground water management/prospects, agriculture, forestry, food and water security, disaster management, etc.

EVALUATIVE REPORT OF THE DEPARTMENT

1. Name of the Department : Department of Home Science
2. Year of establishment: 1988
3. Is the Department part of a School/Faculty of the university?: Faculty of Sciences.
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.): M.Sc. and Ph.D.
5. Interdisciplinary programmes and departments involved: NA
6. Courses in collaboration with other universities, industries, foreign institutions, etc.: NA
7. Details of programmes discontinued, if any, with reasons: NA
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System:
Choice Based Credit System & Semester System
9. Participation of the Department in the courses offered by other Departments:

Yes, under choice based credit system, open courses are being offered in which students from the Department of Home Science can opt for courses from other departments and the following two open courses are offered in the Deptt. of Home Science, “Mental Health among Adolescents and Youth” and “Child and Human Rights” for other students.
10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (Including CAS & MPS)
Professor	01	02	01(Open) 01(CAS)
Associate Professors	01	02	01(Open) 01(CAS)
Asst. Professors	03*	01	
Others (Visiting Faculty, Migrant Teacher Under UGC scheme)			01

- Two faculty members promoted under CAS