# **National Assessment and Accreditation Council (NAAC)**

An Autonomous Institution of the University Grants Commission

P.O. Box No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore – 560 072

# Central University of Punjab Bathinda

To enhance rigour and objectivity to the assessment and accreditation process, the University is requested to upload and submit the following information to NAAC.

Sl. No.	A. Core Indicators	
1.	Percentage of courses where major syllabus restructuring was carried out during last 3 years	Nearly 100%  In the year 2012-13, CUPB had only 12 academic programmes as against 71 at present. Thus most of the courses were designed only in the last three years. A major revision of all courses and programmes was carried out in 2014. (Annexure 1).
2.	Temporal plan in more than 50% of programmes (CBCS/Semester/Annual)	Semester, CBCS in 100% programmes  CUPB follows semester system. UGC guidelines on Choice Based Credit System were accepted by the Academic Council of CUPB in the sixth meeting held on March 5, 2015 and subsequently approved by the Executive Council in its 14 <sup>th</sup> meeting held in 16.03.2015. Choice Based Credit System has been implemented from the academic session 2015-16 for 100% programmes.
3.	Percentage of teachers with Ph.D. qualification General Courses  Professional courses (for ex. MD/DM for medicine and ME/MS for engineering)	100% teachers are Ph.D.  100% teachers are M. Tech./Ph.D.  All faculty members are Ph.D. except three in the School of Engineering and Technology who are M. Tech. as required. All Assistant Professors are NET qualified. At present, both NET and Ph.D. are required qualifications for appointment as Assistant Professor at CUPB.

4.	Student computer ratio	1.9:1.0
		The university has a modern computer centre with latest configuration workstations (Dell®) each featuring all recent processors. The computer centre has 511 computers, 10 high end work stations, blade server with capacity for 16 blades each having with 16 GB RAM (12 are functional), two lease lines of 40 Mbps and 1 Gbps 22 laptops and 22 different kinds of software.
5.	The number of departments with UGC/SAP/CAS/DST/FIST etc, in university	DST grants: 3 ICSSR grant: 3
6.	Number of Post-Doctoral Fellows/Research Associates working a) Locals b) outsiders	Local: 0 Outsider: 3
7.	Number of ongoing research projects/per teacher	1 per teacher (84 Projects and 84 teachers)  CUPB has in operation 24 internally funded and 60 externally funded research projects with a total grant of Rs. 13.76 crores (Annexure 2).
8.	Number of completed research projects/per teacher (Funded by National/International Agencies)	7/84 = 0.084 Seven projects worth Rs. 0.85 crores have been completed recently
9.	Coordinated/Collaborative projects (National and International)	Seven national/ International collaborations (Annexure 3).
10.	National recognitions for faculty for Teaching/Research/Consultan cy/Extension (Reputed/recognised bodies)	As many as 35 CUPB faculty members have received national recognitions (Annexure 4).
11.	Number of Patents (last 5 years)	One in progress
12.	Output of M.Phil. & Ph.D. per faculty	2.71/ Faculty 228 dissertations submitted as per details in Annexure 5.
13.	Revenue generated from consultancy per year	One consultancy of 1.15 lacs
14.	Number of MoUs with International recognized bodies	One with University of Saskatchewan, Saskatoon

1.5	D 11' (' C 1)	20.07/E 1, 1
15.	Publications per faculty	30.97/ Faculty member On various research parameters such as relative <i>h</i> -index, relative research papers citation and relative ranking RG score; CUPB has surpassed all the 13 central universities established in 2009 and is ranked at no 1 (Annexure 6).
	Total number of publications of the university	2602
	Percentage of papers published in journals listed in well-known databases	84.44% (2197 out of 2602 papers are in impact factor/indexed journals)
		The faculty of CUPB has to its credit 1374 papers in impact factor journals, 823 papers in indexed journals, 56 books, 44 edited books, 14 monographs and 291 book chapters. The faculty has 48 research papers in journals with impact
		factor between 8.0 to 31.5; 218 with impact factor of 4.0 to 8.0 and 489 with impact factor of 2.0 to 4.0. Cumulative citation index of the faculty is 25695 and average h-index is 5.77.
16.	Average impact factor of publications	2.947 (for impact factor publications)
17.	Number of papers with more than 10 citations	A total of 25695 citations for 2602 papers. Hence average of 9.87 citations for each paper.
18.	Number of book titles per student (in the central library) excluding book bank	27.7 books/ student (25070 books for 904 students)
19.	Percentage of annual allocation for library spent on purchase of journals (national & international) and other library resources (CDs, Cassettes, etc.)	64.77% and 56.22% of annual library budget was spent on purchase of journals for the years 2013-14 and 2014-15 (Annexure 7).
20.	Number of national/international conferences/ workshops organised per department per year and names of experts participated	Seven Workshops (Annexure 8).
21.	Student performance in national/international level examinations (eg: ET/SLET/GATE/GMAT /CAT, GRE/TOFEL, Civil Services	194 students cleared national level competitive examinations (Annexure 9).
22.	Student Teacher Ratio	10.76:1.00
	(average across all	904 students; 84 Faculty

	disciplines)	
23.	University has the following: i) IQAC ii) Accreditation by national body iii) International accreditation/ISO certification iv) AAA	-IQAC functional and Active -NCTE accreditation Notification No.: NRC/NCTE/NRCAPP- 9698/238 <sup>th</sup> /104363 -AICTE approval dated 27.04.2013 and extension of approval dated 04.06.2014 and 07.04.2015
24.	Outstanding Achievements/Recognition by faculty/alumni both at national and international level	CUPB has Faculty with following distinctions: Fellow, Indian National Science Academy, Fellow of National Academy of Agricultural Sciences, Fellow, Indian Academy of Sciences, Fellow, National Academy of Sciences, DST-INSPIRE Faculty Award, DST Young Scientist award' "Young Scientist Award" by Punjab Academy of Sciences at Punjab Science Congress, Fellow, Punjab Academy of Sciences, J C Bose National Fellow, DS Kothari Post- Doctoral fellowship, Presidents Inspired Teacher's recognition, Ramalingaswamy Reentry fellows, Ramanujan fellow (Annexure 10).
В.	Desirable Indicators	
25.	Outstanding performance of students in sports/cultural activities at national level	Two students Gaurav Joshi, Shweta Thakur participated in national level events
26.	Feedback received from different stakeholders on syllabi etc.  (i) Students (ii) Alumni (iii) Parents (iv) Employers (v) peers	Feedbacks are received from students at the end of each semester for all the subjects. One unique feature of CUPB is that a number of faculty members have carried out web-based anonymous student feedback for self-improvement. Many Centres remain in touch with the relevant industries and incorporate their feedback (Annexure 11).
27.	Percentages of recommendations of the stakeholders implemented	Generally accepted (70-80%). All recommendations are considered in the Board of Studies.
28.	Number of interdisciplinary course combinations introduced during last five years as percentage of total programmes	Six out of 19 Centres offer interdisciplinary programmes. These are Biosciences, South and Central Asian Studies, Human Genetics and Molecular Medicine, Environmental Law, Computational Sciences, Centre for Pharmaceutical Sciences and Natural Products (Annexure 12).
29.	Percentage of Departments conducting tutorial classes	100%. CUPB follows L+T+P plan; Tutorials are a part of courses.
30.	Number of courses, where continuous assessment of student performances is structured into the system	100%. Continuous assessment is a part of the examination system

	D 00 1 11	
31.	Percentage of faculty availing international fellowship for advance studies	CUPB faculty has rich exposure and experience abroad. As many as 31 members of the faculty have abroad training. Out of these, 9 members have spent between 5 to 17 years at prestigious foreign universities (Annexure 13).  Nil
	Percentage of courses/programmes that formally integrate e-learning resources from National Programmed Teaching Enhanced Learning (NPTEL) Digital library retrieval	NII
33.	Percentage of annual budget allocated for augmentation of infrastructure facilities (average of last 3 years)	Average 42.34% (33.59, 26.96 and 66.48% in the last three years)
34.	Total number of class rooms, seminar halls with LCD/OHP etc.	100% classrooms have projectors for power point presentations.
35.	Declaration of results within	Different results were declares within 4 to 9 days after checking, verification, tabulation etc. (Annexure 14).
36.	Average pass percentage of students	95.33% (Annexure 15)
37.	Student Placement percentage average per year	CUPB started with M.Phil-Ph.D. integrated programmes in 2009-10. Students are now graduating. However 29 students have been placed (Annexure 16).
38.	Percentage of student progression to higher education	95% M. Phil. students have progressed to Ph.D.
39.	Average drop-out percentage of students	25.05%
40.	Unit cost of Education (excluding salary)	5.48 lacs
41.	Aggregate percentage of seats filled against seats reserved for various categories as per applicable reservation policy	SC: 63%; ST: 41%; OBC: 60% average of seven years 2009 to 2015 (Annexure 17).
42.	Number of differently abled persons on roll: Teaching/Non Teaching/Students	Total two differentially abled persons are on the roll of the university.
43.	Percentage representation of staff (Teaching/Non Teaching) in decision making bodies	All decision making bodies have reprentation of Faculty and Non-Faculty.
44.	*Percentage of autonomous colleges to the total number of colleges	Not applicable. As per the Act, CUPB is a non affiliating university.

45.	Percentage of teachers from	62% (Annexure 18).
	other states	
46.	Donations received for	Nil
	institution of Chairs,	
	endowments, seminars, and	
	lecture serried in crores of	
	INR in last 5 years	
47.	Contribution of	Nil
	Alumni/parents (average of	
	last 5 years) for development	
	of university in lakhs	
48.	Percentage of Female	48.42%
	Students	
49.	Programme for professional	About 50% of the present faculty has undergone
	development of staff per year	orientation programmes and refresher courses at
		various Academic Staff Colleges. Six faculty
		members attended refresher courses and another
		twenty five have attended orientation
		programmes, two attended special summer
		programmes and two attended special winter
		programmes at various places.
50.	Projection of successful	On web-site, university magazines, annual reports
	innovative practices	etc.

st Applicable only to the affiliating Universities.

Place:	Signature
Date:	Vice Chancellor

#### **Curriculum revision at CUPB**

In the year 2012-13, CUPB had only 12 academic programmes as against 71 at present. Thus most of the courses were designed only in the last three years.

A major revision of all programmes was carried out during 2014 and implemented from session 2015-16. Another major revision is planned during October/ November 2015. Currently each centre is geared up to call meetings of Curriculum Development Committees, Board of Studies and School Boards for up gradation of curriculum for session 2016-2017. Details of the curriculum review carried out by different centres given in the Table shows that most centres of CUPB revised their curriculum every year.

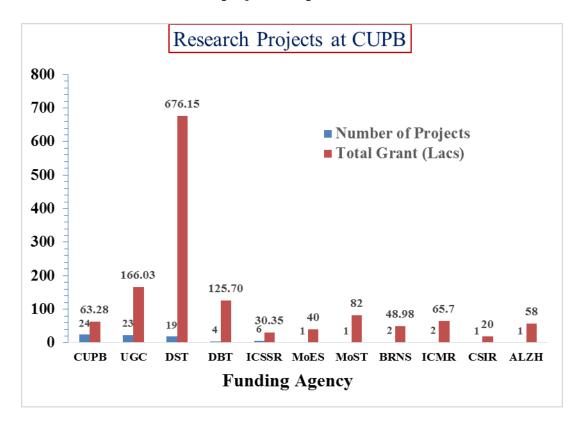
# Curriculum review by different centres of CUPB

Name of the	Name of the	Syllabus	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
Centre	Programme	(First	Revision/	Revision/	Revision/
		approval	Upgrade	Upgrade	Upgrade
Environmental	M.Phil.	Feb, 2010.	July, 2011	Feb, 2013.	November
Science and					, 2014
Technology	M.Sc.	Jul, 2011.	Aug 2012	Feb, 2013.	Nov.,
					2014
	Ph.D.	Coursework	November,	-	-
		was approved	2014		
		in Aug 2012			
Biosciences	M.PhilPh.D.	2011	Aug. 16, 2011	July 17, 2012	-
	Integrated				
	M.Sc.	2011	July 17, 2012	Nov. 2014	
	Biosciences	2011	July 17, 2012	(changed	_
	Diosciclices			nomenclature)	
	M.Sc. in	June 02, 2014	_		
	Molecular	June 02, 2014			
	Genetics				
Comparative	M.PhilPh.D.	December	July-Aug 2011	July-Aug	_
Literature	Integrated	2009	1 7	2011(Course	
				Work)	
	M.A.	June 2012	November	-	-
	Comparative		2014(changed		
	Literature		the		
			nomenclature		
			of programme)		
South and	M.PhilPh.D.	2009-10	November,	-	-
Central Asian	Integrated		2014 (M.Phil.		
Studies			Standalone)		

	M.A. International Studies	2009-10	June 5, 2012	November 2014 (changed the Nomenclature of programme)	-
Economics	M.Phil. Economics	June, 2011	November 2014	-	-
	M. A.	2013	November	_	
	Economics	2013	2014	-	
Environmental		April, 2011	-	_	_
Law	Integrated	,			
	LL.M. in	March 2013	Dec.2014	-	-
	Environmental		(two year and		
	Law (one year)		add more		
			specializations)		
Physical and	M.Sc. Physics	August, 2013	July, 2014	November,	-
Mathematical	(Nanophysics)			2014	
Sciences				M.Sc. Physics	
				(specialization	
				in	
				Nanophysics)	
	M.Phil.	August, 2013	July, 2014	November,	-
	Physics			2014	
Human	M.Sc. Human	Feb.2014	Nov. 2014	-	-
Genetics	Genetics				
Genetic	M.Sc. in	Feb.2014	Nov. 2014	-	
Diseases and	Genetic				
Molecular	Diseases and				
Medicine	Molecular				
	Medicine				
Bioinformatics		Feb.2014	Nov. 2014	-	-
	Bioinformatics				
Computer	M. Tech.	July, 2012	Nov. 2014	_	-
Science and	(Computer				
Technology	Science and				
D1	Technology)	F 1 14	N 2014		
Education	M.Ed./M.A.	Feb14	Nov. 2014	-	-
D : 1:	Education	1.1.0012	N 2014		
Punjabi	M.A.(Hons)	July, 2013	Nov.2014	-	-
Language,	Punjabi and		(changed the		
Literature and	Comparative		nomenclature)		
Culture	Literature				

.

# Research projects in operation at CUPB



# Research Collaboration between CUPB and national/international organizations

S.No.	Faculty	Different Centres/	Aspect of
		National/ International	Collaboration
1.	Prof. R. K. Kohli	Panjab University,	MoEF project
	(Vice Chancellor),	Chandigarh	
	Professor, Centre for		
	EVST		
2.	Prof. R. K. Kohli	Dr. Rakesh Monocha, USDA	Research project
	(Vice Chancellor),		
	Professor, Centre for		
	EVST		
3.	Dr. Anil Mantha	Prof. Perez-Polo JR,	Research
	Centre for Animal		collaboration
	Sciences	Branch, Galveston, TX, USA	
4.	Dr. Felix Bast	CDRI, Lucknow	MoES Project
	Centre for Plant		
	Sciences		
5.	Dr. Raj Kumar, Centre	J	Research
	for Pharmaceutical	NIPER, Mohali	collaboration
	Sciences and Natural		
	Products		
6.	Dr. Vikas Jaitak	Dr. V. K. Kaul	Research
	Centre for	, <u>1</u>	collaboration
	Pharmaceutical	Dr. Saroj Arora	Research
	Sciences and Natural	,	collaboration
	Products	Dr. Iris Stappen	Research
		University of Vienna,	collaboration
		Austria	
		Dr. Nurhayat Tabanca	Research
		University of Mississippi,	collaboration
		University, USA	D 1
		Dr. Leopold Jirovetz	Research
		University of Vienna,	collaboration
	D 0 1 0 1	Austria	D 1
7.	Dr. Sandeep Singh	Prof. Madhu Khullar, PGI,	Research
	Centre for Human	Chandigarh and Dr. Raj	collaboration
	Genetics and	Kumar, CUPB	
	Molecular Medicine		

## National Recognitions for CUPB faculty in teaching and research

#### Prof. R. K. Kohli

- Haryana Vigyan Ratna Award, Government of Haryana 2008-09
- Chairman of the State Expert Appraisal Committee, Ministry of Environment 2009
- Awarded SAARC Chair Bangladesh, Chittagong University 2007-08
- Adjunct Professor, Chinese Academy of Sciences, China 2007-09
- Punjab Rattan Award for Environment Science and Education 2007-08
- Dr K.K. Nanda Memorial Oration Lecture Award, Dopoli Maharashtra 2007
- B.P. Pal National Environment Fellowship Award, Union Ministry of Environment & Forests (highest award) 2001
- Nanda Memorial National Young Scientist Gold Medal Award for Research in Forestry 1988
- Vijay Shree Award, New Delhi 2006
- National Visiting Associateship UGC India
- Gregor Mendel Medal awarded Brno, Czechoslovakia. 1979
- UNESCO-WHO Post-doctoral Fellowship Institute of Experimental Botany, Praha, Czechoslovakia 1978-79
- Second Best Research Paper Hindi Award by CSIR 1998

#### Prof. P. Ramarao

- Dr. I.C. Chopra Award, Regional Research Laboratory, Jammu 1995
- Dr. G. S. Sidhu Science Lecture, Indian Institute of Chemical Technology 2003
- AICOI's Punjab Ratan Award All India Conference of Intellectuals, Punjab 2005
- CDRI Oration Award 2005 Central Drug Research Institute, Lucknow 2005
- Mrs P.P.Suryakumari Prize (Gold Medal) Indian Pharmacological Society (IPS) 2005
- Rajbhasha Award Town official Language Implementation Committee (TOLIC) 2005
- ISCB Award for Excellence Indian Society of Chemists & Biologists 2008
- Pharma-Bio Award CHEMTECH Foundation, Mumbai 2009

# Prof. A. K. Dhawan

- Noel Deerr Award, STAI, Delhi conferred by president A. P. J. Abdul Kalam, 2009
- Distinguished Scientist Award from Society for Promotion of Plant Science Research, Jaipur, 2009
- J. J Chinoy Award from Indian Society for Plant Physiology, New Delhi, 2008
- Y. S. Murti Memorial Lecture Award from Indian Botanical Society, New Delhi, 2007
- K. K. Nanda Memorial Lecture Award, Indian Society Plant Physiology, Delhi, 2006
- Elected as Vice-President, Indian Society for Plant Physiology, New Delhi, 2008

- Panelist and Lead Speaker, World Biotechnology Congress, Chicago, Illinois, USA, 2008
- Member, International Advisory Committee, International Foundation for Sustainable Development in Africa and Asia (IFSDAA), Germany, 2009
- Fellow, Sugar Technologists Association of India, New Delhi, 2003

#### Prof. R. C. Sharma

- Chairman, Monitoring team for DUS testing of Plant Protection of Varieties
   & Farmer's Rights Authority New Delhi (2013-14)
- Convener, Monitoring Team (North Zone) of National Seed Project (2004-2009)
- Member, Monitoring Team (NZ) of National Seed Project (1993-2003)
- Member of ICAR's (Indian council of Agriculture Research) Committee for developing the course structure, operational modalities and evaluation procedure etc. for the Experiential Learning Programme.

#### Prof. R. G. Saini

- National Fellow (ICAR) 1995
- VP Gokhle Prize in Plant Pathology ARI (DST), Pune 1994

## Prof. A. K. Jain

- Visiting Professor, at University of California Davis, USA, under a UNDP/FAO sponsored project.
- UNDP/FAO fellow at Royal Institute of Technology, Stockholm, Sweden.
- SIDA/ICAR fellowship at Royal Institute of Technology, Sweden in 1995.

## Prof. S. K. Bawa

- Professional Involvement Award, Psycho-Linguistic Association of India 1995
- Best Educationist Award, Indian Psychometric and Educational Research Association 2009
- Prof. V P Sharma Award for Contribution in Education, Psycho-Linguistic Association of India 2011
- Sudarshan Rakheja Memorial Award for Best Woman Educationist, Indian Psychometric and Educational Research Association 2014

#### Dr. Rakesh Kumar

- Dr. P.D. Sethi Annual Award 2012, for Best Research Paper.
- FWO Postdoctoral Research Fellowship, Belgium.

# Dr. Krishan Kanta Haldar

Best poster Award, "Resonance energy transfer between dye and QD's"
 Krishna Kanta Haldar and Amitava Patra, presented in the 20th Annual
 General Meeting of the Materials Research Society of India, 2009

## Dr. Anil Kumar Mantha

- 2009 Young Investigator award from the Alzheimer's Drug Discovery Foundation (ADDF), USA.
- 1998-2000 NIMHANS Fellowship, National Institute of Mental Health and Neuro Sciences, Bangalore, India.

# Dr. Jyoti Parkash

• 2008 Won Best Presentation Award in International symposium on "Molecular Aspects of Brain Aging and Neurological Disorders" in November 2008 held at Department of Biotechnology, Guru Nanak Dev University, Amritsar, India.

# Dr. Krishna Chaitanya Rapalli

- 2014: SERB Young Scientist, DST, India
- 2012-13: DST-PURSE Postdoctoral Fellowship

#### Dr. Felix Bast

- "President's Inspired Teacher" by the President of India and spent one week with the President of India as Invited In-Residence Intern at RashtrapatiBhavan, New Delhi 6-12 June, 2015
- Young Faculty Award -2015 (in discipline Bioscience) by Venus International Foundation
- Member of editorial board of Journal of Phylogenetics and Evolutionary Biology and Journal of Cell Science & Molecular Biology
- National Science Foundation-USA Fellowship-2007
- Indian Academy of Sciences Summer Research Fellowship at NIO, Goa-2002
- JNCASR-Rajiv Gandhi Summer Research Fellowship at NCBS-TIFR, Bangalore- 2001

## Dr. Sanjeev Kumar

• Promising Young Researcher Award 2010 (Turkey)

## Dr. Pankaj Bhardwaj

DST Young ScientistFast Track Award 2012.

## Dr. Vinay Kumar

• AU-CBT Excellence Award (2011). Biotech Research Society of India (BRSI).

#### Dr. Anjana Munshi

Member world stroke Bill of Rights

# Dr. Sandeep Singh

• Won Best poster presentation award in "International Symposium on Intermediate Filament Proteins: Recent Trends in Keratin Biology" held on September 28-29, 2007 in ACTREC, Navi-Mumbai.

- Post Doctoral Fellow at City of Hope National Medical Centre, California, USA (March 2010-September 2011).
- Young Scientist Award by Punjab Academy of Sciences in February 2015.

#### Dr. Monisha Dhiman

• 2013- till date Editorial Board Member, J. of Cell Sci. and Mol. Bio

# Dr. Sabyasachi Senapati

• Young Scientist Award by Association of Biotechnology & Pharmacy, Oct 2013, New Delhi, India

# Dr. Neeraj Kumar

• Awarded Dr. D. S. Kothari Post-Doc Fellowship (DSKPDF), University Grant Commission (UGC), 2011, Government of India.

#### Dr. Aklank Jain

- Associate Editor, International Journal of Molecular Biology 2013 onwards
- Ramanujan Fellowship, DST, India June 2012- June 2017

#### Dr. Somesh Baranwal

• Selected for the prestigious Ramalingaswami Re-entry Fellowship of the Department of Biotechnology for the year 2013-2014.

## Dr. Purshotam Sharma

- DST Inspire Faculty Award (Chemical Sciences), DST Government of India, April 2015.
- Christopher Bender Owen Award for best PDF Lecture at Chinook Symposium in Chemistry and Biochemistry, University of Lethbridge, September 26, 2014.
- DST-DFG Awards for Participation in the Meeting of Nobel Laureates and Students in Chemistry, June 2009.

# Dr. Dhanya M.S.

- Won Best paper award in EnviroEnergy- an International Conference on Environment and Energy, 2009.
- Won Second Prize in Poster presentation in National Workshop on Emerging Horizons in Biofuel Research and Application (NWEHBRA), 2009.

#### Dr. Jai Parkash

- INSPIRE Faculty Award (DST/INSPIRE Faculty Award/2011) under INSPIRE Faculty Scheme of Department of Science and Technology (DST), New Delhi, India for carrying out independent research to young achievers for tenure of five years.
- Recipient of Young Scientist Award Under Science and Engineering Research Board Fast Track Scheme for young scientists in physical sciences by Department of Science and Technology (DST), New Delhi, India.

The United States Air Force Office of Scientific Research (USAFOSR)
 Postdoctoral Scholarship at San Francisco State University, San Francisco,
 CA; 2010 – 2011.

#### Dr. Ashok Kumar

Young Scientist Award by Punjab Academy of Sciences

#### Dr. Jitendra Kumar Pattanaik

• Awarded UGC – Dr. D. S. Kothari Post-doctoral fellowship, 2010.

#### Dr. Sachin Kumar

• UGC Dr.D.S Kothari Postdoctoral Fellowship

#### Dr. Rajinder Kumar

 Dr.B.R. Ambedkar National Award by Jyotiba Phule Talent and research Institute, 2010

# Dr. Ramanpreet Kaur

 Roll of Honour by Guru Harkrishan Education Society, Chandigarh, 24 April, 2011

## Dr. Nishtha Kaushiki

• Japan-ASEAN Integration Fund as a part of the Japan –East Asia Network of Exchange of Students and Youth (JENESYS) Programme.

# Dr. Tarun Arora

- Scroll of Honour on Law Day 26 November 2008 by International Council of Jurist on the occasion of International Conference on Rule of Law, 25-26 Nov. 2008.
- Awarded by the Cabinet Minister Mr. Sikandar Singh Malooka, Government of Punjab for creating awareness on Environment Preservation on 15 Aug 2014.
- Honoured by Gulmohar Eco Club under National Environment Awareness Campaign, 2012.

## Dr. Deepak Kumar

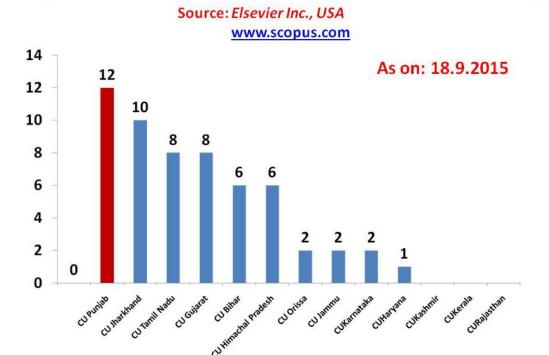
 Young Scientist Award 2011by the Society for Environment and Development (India), PCRA, Ministry of Petroleum & Natural Gas, Government of India.

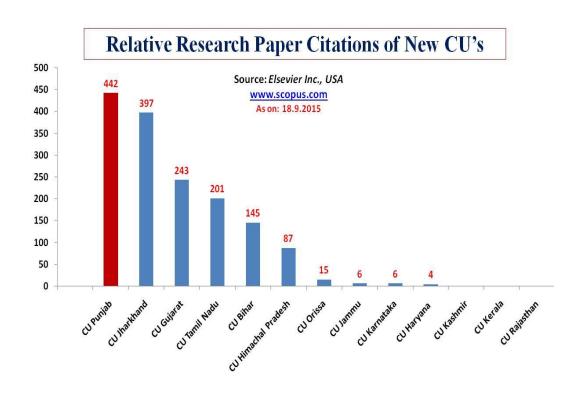
# Students' projects completed

Academic	M.Phil.	M.Pharm.	LL.M.	M.Tech.	M.Sc.	Total
Year						
2011-12	26	NIL	NIL	NIL	NIL	26
2012-13	34	8	4	NIL	11	57
2013-14	50	8	9	17	13	97
2014-15	33	0	3	0	2	38
Total	153	16	16	17	26	228

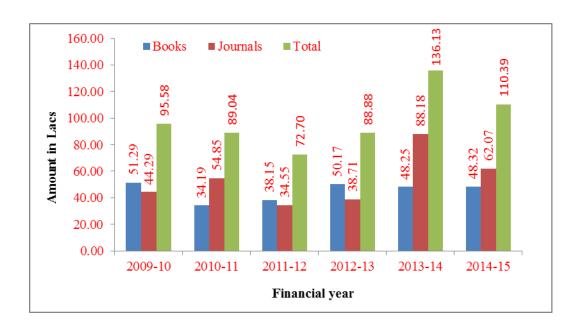
NIL – the programme did not exist during the year.

# Relative h-index of New Central Universities





# **Budget details of CUPB's University Library**



# Workshops/Seminars held at CUPB

# Bioinformatics in Human Genetics: Mutations, Microarray Analysis and Oncologies

A Joint Indo-German workshop on 'Bioinformatics in Human Genetics: Mutations, Microarray Analysis and Oncologies' was organized in association with Institute for Medical Genetics and Human Genetics, Charite-University of Medicine, Berlin, Germany and Guru Nanak Dev University, Amritsar, January 25-29, 2010.

# **SPSS Training Workshop**

One-day SPSS Training Workshop was organized by Centre for Computer Science and Technology and Centre for Mathematical Sciences on June 6, 2014. The participants were trained in SPSS Statistics software package which can be used for various statistical analyses. The participants were given 20 trial CDs of the SPSS software.

## **Business Process Simulation**

Er. Meenakshi and Er. Sukhreet Singh organized a workshop on "Business Process Simulation" on 8 September 2014.

# **Plagiarism Web Tools**

One-day workshop Cum Training Programme on Plagiarism Web Tools held on 12th September, 2014, Organized by University Library.

# Fluorescent in situ Hybridization (FISH),

The Centre of Human Genetics at Central University of Punjab, Bathinda in collaboration with DSS Imagetech Pvt. Ltd. organized a two day (25<sup>th</sup> and 26<sup>th</sup> September of 2014) workshop on Fluorescent *in situ* Hybridization (FISH), a modern technique used in clinics and biomedical research. The fourteen participants had hands on experience about the implementation of the technique in the research laboratory of Centre for Human Genetics.

# One day National Workshop on Training the Trainers: Water Quality and Health

CUPB organised one day workshop for the government school teachers, academicians, researchers and students on February 11, 2015. Guest of Honour of

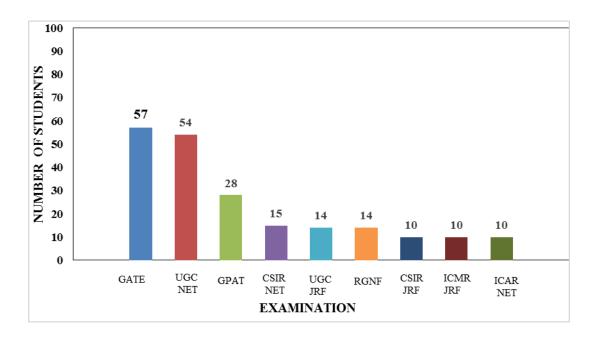
the programme: Dr. Amarjit Kaur Kotfatta, District Education Officer (Secondary Major General (Retd.) R. K. Kaushal described the significance of water while quoting from *Shri Guru Granth Sahib* where Air, Water, and earth has been given equal significance as mentor, father and mother respectively which we all should respect. Key speaker of the workshop: Prof. V. K. Garg of Guru Jambheshwar University.

A poster presentation competition was also organised during the function in which more than 40 participants took part.

# **Bio-diversity for Sustainable Development**

Workshop on 'Bio-diversity for Sustainable Development' organized in collaboration with Punjab State Council for Science and Technology, Chandigarh, National Bio Diversity Authority and State Bio-Diversity Authority, Punjab on International Day for Biological Diversity dated May 22, 2015. Representatives of NGOs, Social Welfare Clubs and Educational Institutes also participated in the event with great enthusiasm.

# Students who have qualified National Level Competitive Examination



# **Outstanding Achievements Recognitions to the credit of CUPB Faculty**

#### National:

- J C Bose National Fellow: 1
- Fellow, Indian National Science Academy: 1
- Fellow, National Academy of Agricultual Sciences:1
- Fellow, National Academy of Sciences:1
- Fellow, Indian Academy of Sciences:1
- DST-INSPIRE Faculty Award: 3
- DST Young Scientist Award: 5
- "Young Scientist Award" by Punjab Academy of Sciences at Punjab Science Congress: 1
- Fellow of Punjab Academy of Sciences, 2015 (FPAS):1
- Awardee of UGC special honorarium of Rs 15000 pm till the age of 65 for being Fellow of academies: 1
- Dr. DS Kothari Post-Doctoral fellowship: 3
- Best Educationist Award: 1
- Prof. V.P. Sharma award for contribution in education: 1
- Sudarshan Rakheja Memorial award for best women educationist: 1
- Presidents Inspired Teachers recognition: 1
- Venus International Foundation's Young Faculty Award: 1
- Ramalingaswami Re-entry fellow 1
- Ramanujan fellow 1

#### International:

Members of CUPB hold important international professional positions:

- Chair/Coordinator, IUFRO (International Union of Forestry Research Organizations, Austria) International Working Party 8.02.04) on Ecology of Alien Invasive Species (2011-2015)
- Chair/Coordinator, IUFRO International WP 4.02.02 on Multipurpose Inventories (2011-15)
- Member IUFRO Task Force on Forests and Biological Invasions (2015-2020)
- New Investigator International Research Grant, Alzheimer's Association
- One faculty is serving as adjunct faculty at University of Texas Medical Branch.
- British Phycological Society Bursary award, Japanese Government Monbukagakusho Fellowship, NSF-USA Fellowship
- Members of CUPB faculty are working on the editorial boards of, as many as, 44 national and international journals.

# Input of industries in the curriculum revision process.

- Various centres like Chemical Sciences, Pharmaceutical Sciences and Natural Products, Environmental Science and Technology, Human Genetics and Molecular Medicine, Computer Science and Technology have made efforts to explore the requirements of the following industries: Panacea Biotech, Zydus, Cadila, Biocon, Sun Pharma, Lupin Laboratories, Thermax India, Merck Speciality, IBM, HP etc.
- Centre for Pharmaceutical Sciences and Natural Products sought feedback from Cipla and Novartis and modified the curriculum of Basics of Drug Design and Drug Action (PMC.513)
- On the advice given by Punjab Pollution Control Board, the Centre for Environmental Science and Technology modified courses of Environmental Pollution (EVS.603), Profiling Environmental Issues (EVS.604), Water Pollution and Control Test (EVS.508) and Air and Noise Pollution and Management (EVS.509).
- CUPB faculty interacts with industry through its advisory bodies like University-Industry Council and University-Industry Forum. Input from corporate bodies helped to include their ideas in the curriculum of the following courses:
  - i) Concepts in Molecular Medicine (LMM.510)
  - ii) Cancer Biology (LMM.552)
  - iii) Radiation Biology (LMM.553)
- CUPB has been benefitted through interactions with the stakeholders in updating the curriculum according to their requirement in the area of anti-cancer medicine, environmental pollution and climate change.

# List of interdisciplinary programmes

Name of the Centre	Name of	Interdisciplinary subjects		
	Programmes	included		
Biosciences	M.Sc. Biosciences	Computer Application,		
		Chemistry, Botany, Zoology,		
		Microbiology and Biotechnology		
South and Central	M.A. International	History, Political Science and		
Asian Studies	Studies	Geography		
Human Genetics and	M.Sc. Human	Genetics, Molecular Biology,		
Molecular Medicine	Genetics; M.Sc.	Bioethics, Immunology,		
	Molecular Medicine	Radiation Biology		
Environmental Law	LL.M.	Law, Environmental Science		
Computational	M.Sc. Chemistry	Chemistry, Bioinformatics,		
Sciences	(Computational	Physics		
	Chemistry), M.Sc.			
	Physics			
	(Computational			
	Physics)			
Centre for	M.Sc. Medicinal	Chemistry, Medicine, Natural		
Pharmaceutical	Chemistry	Products		
Sciences and Natural				
Products				

# CUPB faculty's visits, training and experience abroad

#### Prof. R. K. Kohli

UNESCO-WHO PDF, Institute of Experimental Botany, Praha, Czechoslovakia, 1978-1979

#### Prof. P. Ramarao

The University of Illinois, Chicago, USA 1987-1989
Department of Surgery, Beth Israel Hospital, Harvard University, Boston, USA 1989-1990

#### Prof. A. K. Dhawan

Australian National University, Canberra, Australia 1977-79 Swedish University of Agricultural Sciences, Uppsala 1985 University of California, Davis, USA 1998-99, 2002

## Prof. R. G. Saini

University of Sydney, Australia December 1986 - September 1987

#### Prof. A. K. Jain

University of California, Davis U.S.A. June- August 1986 Royal Institute of Technology, Stockholm, Sweden April –June 1990 Royal Institute of Technology, Stockholm, Sweden January- March 1995

## Dr. Rakesh Kumar

University of Leuven, KU Leuven, Belgium Feb. 2012-Feb. 2013

## Dr. Krishna Kanta Haldar

Weizmann Institute of Science, Rehovot, Israel, November 2012 Ben-Gurion University of the Negev, Beer Sheva, Israel, July 2013-March 2014

# Dr. Rajendra Singh Dhayal

National Dong Hwa University, Hulien, Taiwan July 2011 to Dec. 2014 National Dong Hwa University, Hulien, Taiwan June 2015 to July 2015 National University of Singapore, Singapore November 2011

### **Dr Vinod Kumar**

Siena University Italy, Siena, Italy Jan. 2008 to Dec. 2009 University of Bath, Bath, UK Jan. 2010 to June 2012

#### Dr. Anil K. Mantha

University of Texas Medical Branch Galveston, TX, USA  $30^{th}$ Jan.,  $2006-25^{th}$ May, 2012

# Dr. Jyoti Prakash

Jean-Pierre Aubert Research Center INSERM U837, Place de Verdun 59045 Lille cedex France 7<sup>th</sup> Jan., 2008 – 30<sup>th</sup> June, 2014

# Dr. Ajay Kumar

Department of Digestive Diseases, Emory University, Atlanta, USA 5<sup>th</sup>March, 2014 –6<sup>th</sup>March, 2015

## Dr. Ramakrishna Wusirika

Purdue University, West Lafayette, Indiana, USA 1997-2003 Michigan Technological University, Houghton, Michigan, USA 2003-2015

#### Dr. Felix Bast

Kochi University, Japan April 2005-March 2010

Friday Harbor Laboratories, University of Washington, USA July 2007-August 2007

Natural History Museum, London, England January 2009

# Dr. Sanjeev Kumar

Plant Industry, Centre for Environment and Life Sciences, CSIRO, Floreat, Perth, Western Australia Sep. 25, 2008-Nov. 10, 2008

Plant Industry, Centre for Environment and Life Sciences, CSIRO, Floreat, Perth, Western Australia Oct. 01, 2009-Dec. 21, 2009

## Dr. Anjana Munshi

King Saud University, Riyadh, Saudi Arabia 2011-2012

# Dr. Sandeep Singh

City of Hope National Medical Centre, Duarte, USA 1 year 6 months; March 2010 to September 2011

#### Dr. Monisha Dhiman

University of Texas, Galveston, Texas, USA 6 years 1 month April 2006-May2012

#### Harish Chander

Queen's University, Canada June 5, 2010 – Jan. 19, 2014

Mount Sinai School of Medicine, New York, USA November, 2006 – May 31-2010

Institute for Basic Research, Staten Island, New York USA Jan 31,2005 – November 2006

# Dr. Sabyasachi Senapati

University of Groningen, Groningen, The Netherlands March – September 2011

#### Aklank Jain

Oncology Institute of Southern Switzerland, Bellinzona Switzerland February 2005-March 2007

MD Anderson Cancer Centre, Houston, Texas, USA June 2007-Febraruary 2011 The University of Texas at Austin, Texas, USA March 2011-June 2012

## **Dr. Somesh Baranwal**

University of Pennsylvania, Phialadelphia PA. USA October 2004 - April 2007 Louisiana State University, New Orleans, LA. USA May 2007- July 2010 University of Rochester, Rochester NY USA and Virginia Commonwealth University, Richmond, VA. USA July 2010-January 2013 Virginia Commonwealth University, Richmond, VA. USA February 2013- June 2015

## Dr. Kousik Giri

Sheffield University, Sheffield, UK December 2009 – December 2012 Birmingham University, Birmingham, UK March 2007 – December 2009

## Dr Mahesh Kulharia

Max Planck Institute for Molecular Physiology and Dortmund University, Germany 2003 – 2008

Cardiovascular Research Institute Maastricht and University of Maastricht, The Netherlands 2008 – 2010

Leeds University, Leeds, UK 2005 – 2007

#### **Dr Purshotam Sharma**

University of Lethbridge, Alberta, Canada January 2012 - April 2015

# Dr. Dhanya M.S

University of Saskatchewan, Saskatoon, Canada Sep, 2008- Feb, 2009

## Dr. Ashok Kumar

Michigan Technological University, Houghton, USA 15-08-2013 - 20-12-2013

## Dr. J. K. Pattanaik

Annual Goldschmidt 2007 Conference, Cologne University, Germany August 2007(12 days)

The University of Florence, Florence, Italy August 2013(13 days)

# Dr. Vinay Kumar Rao Associate Professor

Academic Exchange programme on Buddhism in Xian, China July-Aug 2009 Department of Archaeology, Myanmar Sept-Nov, 2010

# Dr. Nishtha Kaushiki

Waseda University, Tokyo, Japan August 2008 - September 2008

 $\underline{Annexure\text{-}14}$  Declaration of result during Academic Year December 2014 - 2015

	Exam	Award List to Exam. Cell	Declared after all	date of submi t awar d List
4th/ 2013-14	08.06.201 5	within 7 days	25.06.2015	9
2nd/2014 -15	12.06.201 5	within 7 days	25.06.2015	5
2nd/2013 -14	12.06.201 5	within 7 days	24.06.2015	4
	2013-14 2nd/2014 -15 2nd/2013	2013-14 5  2nd/2014 12.06.201 -15 5  2nd/2013 12.06.201	4th/ 2013-14     08.06.201 5     within 7 days       2nd/2014 -15     12.06.201 5     within 7 days       2nd/2013     12.06.201 5     within 7 within 7       2nd/2013     12.06.201     within 7	List to Exam. Cell       after all         4th/ 2013-14       08.06.201 within 7 days       25.06.2015         2nd/2014 -15       12.06.201 within 7 days       25.06.2015         2nd/2013 12.06.201 within 7 days       24.06.2015

<sup>\*</sup>after checking and verification of Result and Tabulation Sheets

# **Average pass Percentage of Students**

Academic Year	No. of Student Admitted	Students appeared in final Examination	Absent/Fail/ Reappear	Pass	Pass % of entire batch
2009-10	10	10	0	10	100.00
2010-11	32	26	0	26	100.00
2011-12	66	57	0	57	100.00
2012-13	129	90	0	90	100.00
2013-14	219	175	4	171	97.71
2014-15	192	156	20	136	87.18
Total	648	514	24	490	95.33

# List of students placed at various organizations

S.No.	Name of	Centre	Organisation/Institution
	Student		where employed
1.	Mr. Shokit	Centre for Biosciences	Teacher, Department of
	Amin Poswal		Education, State of Jammu and
			Kashmir, Srinagar.
2.	Mr. Ashish	Centre for Biosciences	Resident Engineer, Confocal
	Kumar Pandey		Laser Scanning Microscope, Ms.
			DSS Imagetech, New Delhi,
			Placed at Imaging facility,
			CUPB.
3.	Mr. Rajiv	Centre for Biosciences	Scientific Assistant, Forensic
	Kumar		Science Laboratory, Punjab
			Police Academy, Phillaur,
			Ludhiana.
4.	Sheetal	Centre for Biosciences	Senior Associate (Indexing and
	Sharma		Abstracting) Innodata India Pvt.
			Ltd., Sector 62, Noida.
5.	Deependra	Centre for Chemical and	Data Analyst
	Kumar	Pharmaceutical Sciences	Innodata, New Delhi.
6.	Vinay Gupta	Centre for Chemical and	Technical Analyst
		Pharmaceutical Sciences	Evalueserve, Gurgaon, New
			Delhi.
7.	Prakriti Monga	Centre for Chemical and	Chemical Analyst
		Pharmaceutical Sciences	Ind Swift, Chandigarh.
8.	Nidhi Singh	Centre for Chemical and	PGT teacher, Ghaziabad, UP.
		Pharmaceutical Sciences	
9.	Ramandeep	Centre for Chemical and	Lecturer, Mata Sahib Kaur,
	Kaur	Pharmaceutical Sciences	college Talwandi Sabo.
10.	Ashish Ranjan	Centre for Chemical and	Research Associate
	Dwivedi	Pharmaceutical Sciences	Integral Biosciences, New
			Delhi.
11.	Anil Rana	Centre for Chemical and	Research Associate
		Pharmaceutical Sciences	Integral Biosciences, New
			Delhi.
12.	Vijayinder	Centre for Chemical and	Research Associate
	Saini	Pharmaceutical Sciences	Integral Biosciences, New Delhi
13.	Gagandeep	Centre for Chemical and	Data Analyst
	Kaur	Pharmaceutical Sciences	Parexal (Heron), Chandigarh.
14.	Mayank	Centre for Chemical and	Pharmacist, NRHM, Bathinda.
		Pharmaceutical Sciences	
15.	Gaurav Joshi	Centre for Chemical and	Project Fellow (UGC Major

		Pharmaceutical Sciences	Project), Central University of Punjab, Bathinda.
16.	Khushmeet Singh	Centre for Computer Science and Technology	Inspector (Grade 1), Department of Food Civil Supplies and Consumer Affairs, Govt of Punjab.
17.	Mandeep Singh	Centre for Computer Science and Technology	Inspector (Grade 1), Department of Food Civil Supplies and Consumer Affairs, Govt of Punjab.
18.	Amandeep Kaur	Centre for Computer Science and Technology	Junior Research Fellow (JRF) Terminal Ballistics Research Laboratory (TBRL) –Defence Research and Development Organization (DRDO).
19.	Krishan Singh	Developmental Economics	Researcher, Planning Commission, Chandigarh.
20.	Rajpreet Kaur	Developmental Economics	Teacher, Govt. Sen. Sec. school, Pathrala, Bathinda
21.	Pushpinder Kaur	Developmental Economics	Teacher, Govt. Middle School, Mandi Khurd, Bathinda.
22.	Disha Bains	Comparative Literature	Assistant Prof in English at K.M.R.D. Jain college, Malerkotla.
23.	Manpreet Kaur	Comparative Literature	PGT-English Govt. Adarsh Sen. Sec. School, Bukan Khan Vala, Ferozpur.
24.	Rajbinder Singh	Centre for Environmental Science and Technology	Setia Paper Mill, Muktsar, Punjab.
25.	Kirti Shrama	Centre for Environmental Science and Technology	Satluj Jal Vidyut Nigam Ltd. Jhabri, Shimla, Himachal Pradesh.
26.	Parminder Singh	Centre for Environmental Science and Technology	ATMA Scheme, Govt. of India
27.	Tarandeep Kaur	Centre for Environmental Science and Technology	Akal College, Faridkot, Punjab
28.	Rimzim Gill	Centre for Environmental Science and Technology	Food Inspector, Govt. of Punjab, Muktsar
29.	Amita Bhatti	Centre for Environmental Science and Technology	University of Birmingham, UK

# SC, ST and OBC students admitted to CUPB

Session	Total Intake	Gen Seats	SC Seats	OBC Seats	ST Seats	PWD Seats	Total Filled Seats
2009-10	20	4	3	3	0	0	10
2010-11	32	23	3	5	1	0	32
2011-12	110	52	4	9	1	0	66
2012-13	145	86	18	22	3	0	129
2013-14	301	128	30	52	7	2	219
2014-15	290	127	25	34	4	1	191
2015-16	507	246	50	104	27	0	427
Total	1405	666	133	229	43	3	1074
	e %age of Filled	47.40	9.47	16.30	3.06	0.21	76.44

# The details of faculty diversity

Faculty /	% of	% of	% of	% of	SC	ST	ОВ	% of
Department	faculty from the same universit y	faculty from other universiti es within the State	faculty from universiti	faculty from other			C	faculty with Post-Doc /Work Experien ce at
								Foreign Universit y
Centre for Chemical Sciences	None	50	50	0	01	-	01	50%
Centre for Pharmaceutic al Sciences and Natural Products	None	75	25	0	-	-	01	25%
Centre for Animal Sciences	None	25	75	0	01	-	01	60%
Centre for Plant Sciences	None	40	40	20			01	60%
Centre for Biochemistry and Microbial Sciences	None	25	75	0	01			50%
Centre for Physical Sciences	None	0	100		01		01	66%
Centre for Environment al Science and Technology	None	60	40	0	-	-	01	-
Centre for Human Genetics and Molecular	None	15	85	0	01	-	01	43%

Medicine								
Centre for	None	100	-	0	-	_	-	-
Computer								
Science and								
Technology								
Centre for	None	0	67	33	-	-	01	66%
Computation								
al Sciences								
Centre for	None	50	50	-	01	_	01	66%
Mathematics								
and Statistics								
Centre for	None	50	50	-	01	_	01	-
Legal Studies								
and								
Governance								
Centre for	None	75	25	-	-	-	01	25%
Comparative								
Literature								
Centre for	None	25	75	-	01	-	01	-
South and								
Central Asian								
Studies								
Centre for	None	50	50	-	01	-	01	-
Economic								
Studies								
Centre for	None	50	50	-	-	01	01	-
Classical and								
Modern								
Languages								
(Punjabi								
Language,								
Literature								
and Culture)								
Centre for	None	0	100		01		01	-
Sociology		_						
Centre for	None	0	100			01		-
Geography								
and Geology							0.5	
Centre for	None	33	67		-	-	02	25%
Education					1			
Overall	0	38.05	59.15	2.78	0.5	0.1	0.89	28.21
Average					2	0		