

NAME	Dr. Abha Kumari			 Photograph
DESIGNATION	Assistant Professor			
EMAIL ID	akumari@amity.edu abha_kumari@yahoo.com			
CONTACT NUMBER				
RESEARCH INTERESTS	<p>Bioprocess Technology: Production of Biofuels: biodiesel and Bioethanol Minerals Bioprocessing and Metals Extraction Biodegradation of Polythene Wastewater treatment</p> <p>Computational Biology: Development of biochemical Network Model for microorganisms Comparative genomics Computational Drug Design</p>			
EDUCATIONAL QUALIFICATIONS:				
Name of College / University	Degree	Area	Year	
Indian Institute of Science, Bangalore	Ph.D.	Biochemical Engineering	2002	
Indian Institute of Science, Bangalore	M.S.	Biochemical Engineering	1997	
EXPERIENCE (in chronological order)				
Designation	Type of post held (teaching/ research)	Name of the Institute	Year (From – To)	
Assistant Professor	Teaching & Research	Delhi Technological University, Delhi	2007-2011	
Visiting Researcher	Research	Tohoku Institute of Technology, Sendai	2006-2007	
DBT Postdoctoral	Research	NCL, Pune	2005-2006	
Post-doctoral	Research	Lakehead University, Canada	2003-2004	
No. of Ph.D. students supervised		Awarded: (no. only)		
		Ongoing: (no. only): 2		
		<p><i>Give details here:</i></p> <p>1. Abha Kumari and K.A. Natarajan, Electroleaching of polymetallic ocean nodules to recover copper, nickel and cobalt, <i>Minerals Engineering</i>, (2001) 14(8), pp.</p> <p>2. Abha Kumari and K.A. Natarajan, Electrobioremediation of polymetallic ocean nodules <i>Hydrometallurgy</i> (2001), 62(2), pp.125-134.</p> <p>3. Abha Kumari and K.A. Natarajan, Bioremediation of ocean manganese nodules in the presence of reducing agents. <i>The</i></p>		

7. **Abha Kumari** and K.A. Natarajan, Electrochemical aspects of leaching of ocean nodules in the presence and absence of microorganisms, *International Journal of Mineral Processing*, 2003
8. Lionel J.J. Catalan and **Abha Kumari**, Efficacy of lime mud residues from Kraft mills to amend oxidized mine, *International Journal of Environmental Engineering*, 2005

No. of Ph.D. Students guiding: 2

No. of Post Graduate student Guided: 5

No. of Graduate Student Guided: 51

Invited Talks

1. Application of biotechnology in the recovery of valuable metals from ocean Manganese Nodules – Lakehead University 2004.
2. Electrobiochemical process to recover valuable metals from ocean Mn nodules, IIT, Delhi, 2004
3. Microbiological processing of ocean Mn nodules to recover valuable metals, IIT, Chennai, 2005
4. Transport phenomena in biochemical reactor - Vishreshwarya Institute of Technology, Bangalore 2005.
5. Biochemical Engineering - Vishreshwarya Institute of Technology, Bangalore 2005.
6. Application of biotechnology in the recovery of valuable metals from ocean Manganese Nodules – Lakehead University 2004
7. Keynote Speaker Engineering Profession Today and Vision for 2020 in National Conference on Engineering Profession – Vision 2020 November 30, 2009, Delhi
8. Panelist in 5th National Convention : Seamless Engineering, ECI India, September 30, 2009, Delhi
9. Judge for National Bioinformatics Competition in Annual Technical Festival at NSIT, Delhi.
10. Development of oxygen evolution anode for electrolysis of seawater, IIT, Kanpur, 2007
11. Seawater electrolysis- For Prevention of Global Warming and Supply of Abundant Renewable Energy, 2010, CSMRI, Ahmadabad
12. Bioprocessing of chalcopyrite to recover copper, KARYON, DTU, 2009

(a) Curriculum Developed

Bachelor of Technology in Biotechnology
 Master of Technology in Biotechnology
 Master of Technology in Bioinformatics

(b) Courses Taught in Undergraduate (B. Tech) in Biotechnology

Metabolic Engineering
Principles of Chemical Engineering
Bioprocess Technology Theory
Bioprocess Technology Laboratory
Fundamentals of Biochemical Engineering
Downstream Processing Theory
Downstream Processing Laboratory
Fermentation Technology

(c) Courses Taught in Postgraduate (M. Tech) in Biotechnology

Bioprocess Technology Theory
Bioprocess Technology Laboratory
Advanced Downstream Processing Theory
Advanced Downstream Processing Laboratory
Fundamentals of Biochemical Engineering
Computational Biology I Theory Computational Biology Lab Computational
Biology II Theory Computational Biology II Laboratory Bioinformatics

Book Reviewed

Bioinformatics by PHI Publication, 2012

PROJECT Completed

- Bioremediation of arsenic from Industrial wastewater
Granted by: DBT, 2005 Amount: 10.00 lakhs

PROJECTS Funded

- Lab scale biorefinery for concomitant production of biofuels along with other important products using agricultural waste
Project funded by DBT, Govt. of India, 2013 Amount: 28 lakhs

FELLOWSHIPS AWARDED

Pool Officer Awarded by CSIR – 2009

DBT-PDF Fellowship, Dept. of Biotechnology, Govt. of India, 2005

Best Poster Award, Metallo 2007

Fellowship Awarded for M. S. and Ph.D. by IISc Bangalore

ADMINISTRATIVE RESPONSIBILITIES

- Board of Studies (BOS) member, Department of Biotechnology, Punjab Technical University, Chandigarh
- Board of Studies (BOS) member, Department of Biotechnology, DTU, Delhi
- Board of Examination (BOE) member, Department of Biotechnology, DTU, Delhi
- Member of Library Committee, DTU, Delhi – 2002-2011

Conference and EVENTS ORGANISED

- Chairman. LRTE, DTU, 2007
- Chairman, Corporate Meet, 2007
- Advisor, ATF, KARYON, 2007-2011

**AWARDS & HONOURS/
DISTINCTI
ONS**

DBT PDF Fellowship
CSIR Pool Officer Fellowship
CSIR Pool Officer Fellowship
IISc Doctorate Fellowship

IISc Master Fellowship

Best poster in IIM, India

MEMBERSHIP with Professional/
Academic bodies

Board Of Studies, Punjab Technical
University, Punjab
IIM, India