PROF. KAMALUDDIN

I. PERSONAL DETAILS:

1. NAME : **KAMALUDDIN**

2. DATE & PLACE OF BIRTH : May 11, 1949; Ghazipur, U.P., (India)

3. PRESENT STATUS : Professor & Head
Department of Chemistry
Indian Institute of Technology Roorkee,
Roorkee - 247 667, India

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II. EDUCATIONAL QUALIFICATION :

Degree	Institution	Year	Division	Subject
BSc	AMU Aligarh	1968	1st	Physics,Chemistry, Mathematics
MSc	AMU Aligarh	1970	1st	Chemistry
MPhil	AMU Aligarh	1971	-	Chemistry
PhD	AMU Aligarh	1974	-	Chemistry

III. POSITIONS HELD

Designation	Employer	Duration
Scientist-in-Pool	CSIR, New Delhi	Feb 6,1979 to Sep 5, 1979
Lecturer	University of Roorkee, Roorkee	Sep 6,1979 to Oct 24,1989
Reader	University of Roorkee, Roorkee	Oct 25,1989 to April 8, 1996
Professor	Indian Institute of Technology Roorkee, Roorkee	April 9,1996- continued

IV. MEMBERSHIP OF PROFESSIONAL SOCIETIES

1 Member, International Society for Studies on Origins of Life, U.S.A.

2 Fellow, Indian Chemical Society, Calcutta. [F/3103(LM)(1989)]

3 Life member, Indian Council of Chemists, Agra.[(LF-113)(27-11-1989)]

4 Life member, AOTS Japan Alumni Society, Delhi.

5 Life member, Indian Science Congress Association, Calcutta.(L3728)

6 Life member, Thomson Alumni Association, Roorkee. (Membership No. 7578,ST (7-8-1991)

7 Life member, A.M.U, Old Boys Association, Aligarh. Ledger Folio No. 2151 (Dec. 1991)

8 Elected Councilor, International Society for Studies on Origins of Life, U.S.A., 2008-2011.

9 Elected Vice- President (Northern Zone), Indian Council of Chemists, Agra 2009-2011.

V. FELLOWSHIPS AND AWARDS

1 Fellowships from Association for Overseas- Technical Scholarship, Japan for a Post Doctoral Research at Mitisubishi- Kasei Institute of Life Sciences, Tokyo, Feb14, 1977 - Oct 31, 1978.

2 Fulbright Travel grant for carrying out a Post Doctoral Research at Rensselaer Polytechnic Institute, Troy, New York, April 20, 1987 - April 17, 1989.

3 Post Doctoral Fellowship, Renesselaer Polytechnic Institute, Troy, New York, June 15, 1992 - June 13, 1993.

4 Senior Associate, The Abdus Salam International Centre for Theoretical Physics, January 1, 2002 - December 31, 2007.

VI. ACADEMIC ASSOCIATIONS

1 Member, Board of Studies, Applied Sciences, Kumaun University, Nainital, Nov 25, 2003 - Nov 24, 2006.

2 Member, Board of Studies, Applied Science and Humanities Section, Women's, Polytechnic, A. M. U. Aligarh, 2005 – 2007 ; 2009- 20011.

3 Member, Advisory Committee for National Symposium on Green Chemistry, Thapar University, November 7 – 8, 2008.

4 Member, Board of Studies, Chemistry Department, Jamia Millia Islamia, New Delhi, 2008-2010.

5 Member, Board of Studies, Applied Chemistry Section, Z.H. College of Engineering & Technology, AMU, Aligarh, 2008-2010.

6 Member, Advisory Committee for National Symposium on emerging Trends in Chemical Analysis & Synthesis, Sant Longowal Institute of Engineering and Technology, Sangrur, March 12 – 13, 2009.

7. Member, Board of Studies, Applied Science and Humanities Section, University Polytechnic, A. M. U. Aligarh, 2009- 2011.

8. Member, Board of Studies, Department of Chemistry Jiwaji University, 2009-2011

VII. RESEARCH SPECIALIZATION

1. Epoxidation of Olefinic Compounds using Immobilized Catalysts
2 Chemical Evolution & Origins of Life
3 Astrobiology

VIII. PUBLICATIONS:

Published 67 research papers in national and international journals.

IX. THESES SUPERVISED:

M. Sc.	.....	26
M. Phil.	.....	10
Ph. D.	.....	11 (In Progress - 3)

X. CONFERENCE / SYMPOSIA ATTENTED/ INVITED LECTURES

Participated in 41national and international conferences/workshops. Chaired Sessions and delivered Invited Talks in several national and International Conferences.

Deliverd two lectures on (Origin of Life on Earth and Origin of Life Beyond the Earth), These lectures were live telecast on Eduset Channel.

XI. TEACHING EXPERIENCES:

31 years to Postgraduate and Undergraduate classes.

SELECTED PUBLICATIONS
(Kamaluddin)

1. Shah Raj Ali and Kamaluddin,"The Interaction of Ribose Nucleotides with Metal Hexacyanochromates (III) and the Relevance to Chemical Evolution", Bull. Chem. Soc. Jpn, **77**(9),1681-1686(2004).

2. Shah Raj Ali, Tanveer Alam and Kamaluddin," Interaction of Tryptophan and Phenylalanine with Metal Ferrocyanides and its Relevance in Chemical Evolution," Astrobiology, **4**(4),420-426(2004).

3. Shah Raj Ali and Kamaluddin, '' Interaction of Aromatic Amino Acids with Metal Hexacyanochromate(III) Complexes: A Possible Role in Chemical Evolution, '' Bull. Chem.Soc. Jpn., **79**(10), 1541-1546 (2006).

4. Shah Raj Ali and Kamaluddin, "Interaction of Ribonucleotides with metal Hexacyanocobaltate (III): A possible Role in Chemical Evolution," Orig. Life. Evol. Biosph., **37**(3), 225-234 (2007).

5. Avnish K. Arora and Kamaluddin, '' Interaction of Ribose Nucleotides with Zinc Oxide and Relevance in chemical Evolution, '' Colloid and Surfaces A: Physico Chem. Eng. Aspects, **298,** 186 - 191 (2007).

6. Avnish Kumar Arora, Varsha Tomar, Aarti, K.T. Venkateswararao and Kamaluddin, "Hematite - Water System on Mars and its Possible Role in Chemical Evolution," International Journal of Astrobiology **6(4):** 267-271 (2007).

7. V. Tomar, G. Bhattacharjee, Kamaluddin and Ashok Kumar, "Synthesis and Antimicrobial Evaluation of New Chalcones Containing Piperazine or 2,5-Dichlorothiophene Moiety, Bioorganic & Medicinal Chemistry Letters, **17:** 5321 (2007).

8. Avnish Kumar Arora and Kamaluddin, "Role of Metal Oxides in Chemical Evolution: Interaction of Ribose Nucleotides with Alumina" Astrobiology. **9(2):**165-171 (2009).

9. V.Tomar, G. Bhattacharjee, Kamaluddin, S. Raj Kumar, K. Srivastva and S.K. Puri "Synthesis of new chalchone derivatives containing acridinyl moiety with potential antimalarial activity " Europian J. Med. Chem., **45:** 745 (2010).

DETAILS OF SPONSORED PROJECTS
(Kamaluddin)

Sl. No.	Title	Funding Agency	Amount Rs.	Year	Co- supervisor
1.	Studies on evolution of Transition Metal Enzymes (Sanction No. 10/2/116 Dated Jan 12, 1984)	ISRO Bangalore	2,57,021/-	1984-1987	None
2.	Epoxidation of Olefinic Compound Using Novel Catalytic Systems.(Sanction No. 5(67)/85- EMR-II April 1985)	CSIR New Delhi	94,000/-	1985-1988	Dr. D.R. Gupta
3.	Studies on Role of Metal Ions in Chemical Evolution(Sanction No. SP/I-2/PC5/86 Dated Dec 19, 1986)	DST New Delhi	2,76,500/-	1987-1989	Dr. Mala Nath
4.	Chemical and Pharacological Investigation on some Wild Plants of Western Himalayas- A Search for Antifertility (Sanction No. F12-7/86(SR-III) Dated March 2, 1987)	UGC New Delhi	1,84,390/-	1987-1991	Dr. D.R. Gupta
5.	Stereoselective Epoxidation of α,β-Unsaturated Carbobyls Using Novel catalytic Systems (Sanction No. CST/SERC/Chemistry /11D-6497 Dtd. March 26,1995)	CST UP, Lucknow	1,42,600/-	1995-1998	None

6.	Role of Metal Cyanogen Complexes As prebiotic Catalyst (Sanction No. 10/2/260 Dtd. May 30,2000)	ISRO Bangalore	5,47,000/-	2001-2003	Dr. M. R.Maurya
7.	Role of Metal Oxides as Catalyst In Chemical Evolution and Origin of Life (Sanction No. 10/2/318 Dtd. January 18, 2005)	ISRO Bangalore	735,000/-	2005	None
8.	Hematite - Water System on Mars and its possible role in Chemical evolution and (Sanction No. ISRO/RES/2/344 2007-08 dated March 18,2008)	ISRO Bangalore	24,70,000	2008	None

DETAILS OF THESIS SUPERVISED
(Kamaluddin)

Doctor of Philosophy

S.No.	Name of Student	Thesis Title	Year	Co-Guide
1.	Sushma W. Deopujari (Ms)	Studies on Evolution of Iron and Zinc containing Enzymes.	1988	Dr. Mala Nath
2.	Shobha Naithani (Ms)	Epoxidation of some α, β-Unsaturated Carbonyl Systems.	1988	Dr. D.R. Gupta
3.	Archana Sharma (Ms) 2/4/1987	Role of Metal Ferrocyanides in Chemical Evolution.	1991	Dr. Mala Nath
4.	Harsh Vardhan Singh 1/1/1992	Epoxidation of Unsaturated Compounds Using Transition Metal Complexes as Catalyst.	1994	None
5.	Amit Kr. Srivastava 14/3/1989	Studies on Redox Reactions of some Organic Compounds of Biological Importance.	1994	Dr. R.N. Goyal
6.	Tanveer Alam 13/1/1994	Studies on Double Metal Cyanides as Prebiotic Catalyst.	1998	None
7.	Hina Tarannum (Ms) 9/1/1996	Stereo Selective Epoxidation of α,β-Unsaturated Carbonyls Using Novel Catalytic Systems.	1999	None
8.	Shah Raj Ali 31/7/01	Role of Metal Cyanogen Complexes as Prebiotic Catalyst.	2005	Dr. M. R. Maurya
9.	Avnish Kr. Arora 3/1/03	Studies on Metal Oxides as Prebiotic Catalyst	2007	None

10.	Varsha Tomar (Ms) 7/8/02	Synthesis of Chalcones and its Derivatives of Physiological Importance	2008	Dr. G. Bhattacharjee
11.	Aarti (Ms) 24/7/05	Catalytic Aspects of Immobilised Metal Complexes	2009	Dr. M. R. Maurya
12.	Uma Shankar 2/1/2007	Studies on Metal Oxides as Prebiotic Catalyst		Dr.G. Bhattacharjee (in progress)
13.	Brij Bhushan 1/1/2008	Role of metal Oxides as Catalyst in Chemical Evolution and Origin of Life		None (in progress)
14.	Anand Kumar	Role of Double Metal Cyanides in Chemical Evolution		None (in progress)