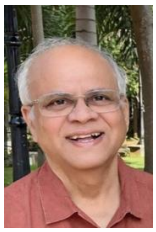

BIODATA

Name: Narayanasami Sathyamurthy

Born: July 10, 1951

Position:

Honorary Professor, IISER Mohali (July 2020 - present)

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Academic Qualifications:

B.Sc. Annamalai University, Annamalainagar 1970
M.Sc. Annamalai University, Annamalainagar 1972
Ph.D. Oklahoma State University, Stillwater OK USA 1975

Positions Held:

Post-doctoral Fellow, University of Toronto, Toronto Canada 1975-78
Assistant Professor, University of Toronto, Toronto Canada 1977-78
Lecturer, Indian Institute of Technology Kanpur, Kanpur 1978-80
Asst. Professor, Indian Institute of Technology Kanpur, Kanpur 1980
Professor, Indian Institute of Technology Kanpur, Kanpur 1985 – 2016
Institute Chair Professor, Indian Institute of Technology Kanpur, Kanpur 2007 – 2016
Director, Indian Institute of Science Education and Research (IISER) Mohali (June 2007 – September 2017)
Honorary Director, Centre for Cooperation in Science and Technology among Developing

Societies (CCSTDS), Chennai (May 2018 – August 2020)
Visiting Professor, University of Rome, Rome, Italy, May-June 2000
Head, Department of Chemistry, Indian Institute of Technology Kanpur, Kanpur 1998-2001
Convener, Multi-Disciplinary Initiative in Biological Sciences and Bio-engineering, IIT Kanpur 2001-2002
Dean of Faculty Affairs, Indian Institute of Technology Kanpur, Kanpur 2002-2004
Member (Senate Nominee), **Board of Governors**, IIT Kanpur 1997-99
Member, Council, Indian Academy of Sciences, Bangalore, 2001-2006
Chairman, National Scientific Committee, International Chemistry Olympiad, Mumbai, 2001
Founder President, Association of Chemistry Teachers, 2001-2004.
Vice-President (International Affairs), Indian National Science Academy, New Delhi 2010-12
Member, **Scientific Advisory Committee to the Cabinet, Government of India**, 2013-2018
President, Chemical Research Society of India, April 2017-March 2020
Honorary Professor, S. N. Bose National Center for Basic Sciences, Calcutta 1995-98
Honorary Professor, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore 2000-2002; 2007-2019
Visiting Professor, Central University of Punjab, Bhatinda (2019-2022)
Visiting Professor, IISER Thiruvananthapuram (Oct. 2020-Oct. 2023)
Honorary Professor, IISER Kolkata (Feb. 2021-Feb. 2024)

Awards and Honors:

Young Scientist Medal, Indian National Science Academy, New Delhi 1980
Young Associate, Indian Academy of Sciences, Bangalore 1983
Alexander-von-Humboldt Fellow, Max-Planck-Institut f. Strömungsforschung, Göttingen, Germany 1986-87
INSA Research Fellow, Indian National Science Academy, New Delhi 1989-91
Rev. Yedanapalli Memorial Award, Indian Chemical Society 1989
S.S. Bhatnagar Prize in Chemical Sciences, Council of Scientific & Industrial Research, New Delhi 1990
Fellow, Indian Academy of Sciences, Bangalore 1990
Fellow, Indian National Science Academy, New Delhi 1992
Sir C.V. Raman Award, Hari Om Ashram Trust, University Grants Commission, New Delhi 1997
FICCI Award, New Delhi 2001
Silver Medal, Chemical Research Society of India, Bangalore 2001
Professor Navneetha Rao Best Teacher Award, Andhra Pradesh Academy of Sciences, Hyderabad 2003
Fellow, The World Academy of Sciences, Trieste, Italy 2005
J. C. Bose National Fellow, Department of Science and Technology, New Delhi, 2006-2016
Institute Fellow, IIT Kanpur, 2013
SASTRA-CNR Rao Award for Chemistry and Material Science 2016, Sastra University, Thanjavur, Tamilnadu
Sir C V Raman Medal, Indian National Science Academy, New Delhi, 2016
Lifetime Achievement Award 2022, Indian Chemical Society, Kolkata
Life Fellow, Indian Chemical Society, Kolkata, Dec. 2022 –

INSA Distinguished Professor, IISER Mohali (Jan 2024 - July 2026)

Ph.D. Theses Guided:

I. NoorBatcha 1982
Tomi Joseph 1983
Sukarma Thareja 1985
K. Raghavan 1986
V. Mohan 1986
N. Balakrishnan 1993
Sanjay Kumar 1993
C. Kalyanaraman 1994
S. Mahapatra 1996
N. Chakrabarti 1997
Shruti Maheshwary 2000
B. Maiti 2001
Aditya Narayan Panda 2004
U. Lourderaj 2004
Kousik Giri 2007
Ashwani Kumar Tiwari 2007
C. N. Ramachandran 2007
Brijesh Kumar Mishra 2008
Pradeep Kumar 2012
Sujitha Kolakkandy 2012
Saurabh Srivastava 2013
Moumita Majumder 2013

Edited Books

Edited: **Reaction Dynamics: Recent Advances**, Narosa (New Delhi) and Springer-Verlag (Berlin) 1991

Edited, along with R Bandyopadhyay: **Institution Building: The Story of IISERs**, Indian Academy of Sciences, Bengaluru, 2018

Edited, along with several others, **Resonance-75 Promoting Science Education**, Indian Academy of Sciences, Bengaluru, 2022

Editorship in different journals

Member, Editorial Board, Proceedings of the Indian Academy of Sciences (Chemical Sciences) 1993 - 2000

Member, Editorial Board, IITK Series of Advanced Texts 1995-2000

Member, General Committee, International Conference on the Physics of Electronic and Atomic Collisions, 1993-96

Editor, Proceedings of Indian National Science Academy (Part A) 2000-2005

Member, Editorial Board, Indian Journal of Chemistry A 2001-2007

Member, Editorial Board, Indian Journal of Chemistry B 2005-2007

Member, Editorial Board, Journal of Theoretical and Computational Chemistry (JTCC), World Scientific, 2002-2020

Member, Editorial Board, Journal of Computational Biophysics and Chemistry (JCBC), World Scientific, 2020-2022

Member, Editorial Board, International Reviews in Physical Chemistry, 2005-.

Member, Editorial Advisory Board, Journal of Physical Chemistry, 2007-2009

Member, Editorial Board, European Physical Journal D, 2010-2021

Member, Editorial Board, Current Science, 2015-

Associate Editor, Resonance – Journal of Science Education, Sep. 2017-Dec. 2017

Chief Editor, Resonance – Journal of Science Education, Indian Academy of Sciences, Bengaluru, Jan. 2018- Dec. 2020

Sponsored Research Projects:

Study of reactive and nonreactive collisions, DST 1980-84

Certain aspects of molecular reaction dynamics, DST 1984-87

Chemical Dynamics and Laser Spectroscopy, INDO-US project (collaborator: J.W. Gadzuk) 1986-91

Fractals, kinematics, and complex formation, CSIR 1990-1993

Dynamics of molecular processes on surfaces, INDO-US Project (collaborator: J.W. Gadzuk) 1992-97

Ion-molecule reactions, CEC (Brussels) (collaborators: F.A. Gianturco and L.A. Zuelicke) 1993-97

Time-dependent quantum mechanical approach to reactive scattering and related processes, DST 1998-2002

Structure and stability of water clusters, protonated water clusters, water clusters in a constrained environment and gas hydrates and molecular solvation, CSIR 2003-2006

Optical and Electrical properties of doped fullerenes and carbon nanotubes, DMSRDE, Kanpur 2006-2009

Non-adiabatic processes, Indo-Portugal Project (Collaborator: A J C Varandas) 2007-2010

Organized:

Winter School on Molecular Reaction Dynamics January 1-14, 1984

The Second Winter School on Molecular Reaction Dynamics Dec. 27, 1987 - January 9, 1988

Co-organized with Professor P. Raghunathan:

Symposium on Magnetic Resonance, Instrumentation and Theoretical Chemistry, July 29-31, 1988

Co-organized with Professors B. M. Deb and S. Ramasesha

Discussion Meeting on Time-dependent quantum mechanics of many electron systems, JNCASR & IISc Bangalore, Jan. 9-12, 1996

Co-organized with Professor R. Ramaswamy

TC2K: Discussion Meeting on Theoretical Chemistry, IIT Kanpur Dec. 22-24, 2000

Co-organized with Professor T. K. Chandrashekar

Sixth CRSI National Symposium in Chemistry, IIT Kanpur Feb. 6-8, 2004

Invited Lectures

Conferences, Symposia and Winter/Summer Schools: India

Annual Convention of Chemists, Kurukshetra September 24, 1978

Winter School on Theoretical Chemistry, Jadavpur University, Calcutta October 1981

Annual Convention of Chemists, Cuttack December 28, 1983

Symposium on Symmetry and Topology in Chemistry, Platinum Jubilee Celebrations of the Indian Chemical Society Jadavpur October 17, 1984

Annual Meeting of the Indian Council of Chemists, Gorakhpur January 1, 1985

DST/PAC workshop on Update in Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore January 13-14, 1985

National Conference on Theoretical Chemistry and Spectroscopy Jadavpur, Calcutta December 4-6, 1985

Winter School on Lasers in Chemical and Biological Sciences, I.I.T. Delhi December 18, 1987

Symposium on New Trends in Kinetics and Mechanism and Role of Trace Metal Ions, Univ. Rajasthan, Jaipur Feb. 20-23, 1988

Perspectives in Scientific Research, Bihar Council of Science and Technology, Patna March 26, 1988

Winter School on Statistical Mechanical Applications in Chemistry, I.I.T. Bombay December 22-24, 1988

National Symposium on Physical Organic Chemistry, Madurai Kamaraj University February 27-28, 1989

Symposium on Essential Role of Fundamental Scientific Research - jointly organized by the Indian National Science Academy and the Indian Academy of Sciences Bangalore Dec. 15, 1989

Symposium on Trends in Chemical Dynamics, Tata Institute of Fundamental Research, Bombay Dec. 17, 1989

Mid-Year Meeting, Indian Academy of Sciences, Bangalore July 27, 1990

DST Group Monitoring Workshop for Young Scientists, Shillong, August 27, 1990

Academy Discussions of Trends in Theoretical Chemistry, IIT Madras Sept. 30 - Oct. 1, 1990

8th National Workshop on Atomic and Molecular Physics, Univ. Hyderabad, December 6-11, 1990

Annual Convention of Chemists, Bodhgaya Univ., Gaya Dec. 27, 1990

All India Symposium on Structure, Activity and Dynamics: Advancing Frontiers, New Delhi June 3-4, 1991

DAE Symposium on Radiation and Photochemistry, BARC, Bombay Jan. 27-30, 1992

Discussion meeting on ultrafast processes in chemistry, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, Sep. 22-23, 1992

Academy meeting of theoretical chemistry, IIT Kharagpur, February 1993

S. N. Bose Centenary meeting, Calcutta, December 30, 1993 - January 2, 1994

Discussion meeting of "Computer simulations in materials research", Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, November 15-17, 1994

International Symposium on Spectra, Structure and Dynamics, Indian Association for the Cultivation of Science, Jadavpur, Calcutta, November 28-30, 1994

Winter School on Chemical Applications of Statistical Mechanics, IIT Bombay, December 1994

Symposium on Density Functional Theory, Panjab University, Chandigarh, February 1995

Discussion meeting on quantum chemistry, Indian Institute of Science, Bangalore, July 26-27, 1995

Interdisciplinary Seminar, Indian National Science Academy, New Delhi, October 4, 1995

International Discussion Meeting on Time-Dependent Quantum Mechanics of Many Electron Systems, IISc Bangalore, Jan. 9-12, 1996

Discussion Meeting on Ion-Atom and Ion-Molecule Collision Phenomena, TIFR, Bombay January 29-31, 1996

National Seminar on Molecular Dynamics and Structure, IIT Madras April 5-6, 1996

Academy Discussion Meeting on Theoretical Chemistry, Mahatma Gandhi University, Kottayam, December 5-8, 1996

Workshop on "Recent Developments in Chaotic Dynamics", Bharatidasan University, Tiruchirapalli, December 9-13, 1996

National Seminar on Concepts in Chemistry, CMS College, Kottayam, February 10-13, 1997

Golden Jubilee Conference on Nonlinear Dynamics & Computational Physics, PRL, Ahmedabad, Nov. 18-22, 1997

XII International Conference on Computers in Chemical Research & Education, Univ. Poona, Pune, Jan. 5-9, 1998

Frontiers in Chemistry, Banaras Hindu University, Varanasi, Jan. 30-31, 1998

International Discussion Meeting on Intense Laser Fields and their Interaction with Matter, Goa, Feb. 17-19, 1998

International Discussion Meeting on Ultrafast Chemical Phenomena, JNCASR & IISc Bangalore, March 2-6, 1998

Frontiers in Inorganic Chemistry, IISc Bangalore, July, 1998

SERC School on "Atoms and Molecules in Intense Fields", PRL, Ahmedabad, February, 1999

Seminar on Ultrafast Processes in Biology, Chemistry and Physics, University of Madras, Chennai, March 11-13, 1999

National Seminar on Advances in Electron Transfer Processes, Madurai Kamaraj University, Madurai, July 15-16, 1999

International Conference on Chemistry and 36th Annual Convention of Chemists, Indian Chemical Society, Calcutta, Dec. 11-16, 1999

Indo-French Workshop on “Advances in the understanding of adsorption phenomena at solid/aqueous solution interfaces, TRDDC, Pune Feb. 12-15, 2001

Annual Meeting of the Chemical Research Society of India, National Chemical Laboratory, Pune, Feb. 1-3, 2002

Indo-Japan Joint Workshop on Frontiers of Molecular Science Developed by Advanced Spectroscopy, Indian Association for the Cultivation of Science, Jadavpur, Kolkata, Dec. 3-4, 2004

Fourth annual Convention of Chemistry Teachers, Science City, Ahmedabad, Nov. 2004

Theoretical Chemistry Symposium, BARC, Mumbai Dec. 9-12, 2004

XVth National Conference on Atomic and Molecular Physics, Physical Research laboratory, Ahmedabad, Dec. 20-23, 2004

Symposium on Structure and Dynamics, IIT Madras, Chennai April 22, 2005

Recent Advances in Nanoscience and Technology, Periyar University, Salem Sep. 29, 2005

Humboldt Kolleg, Banaras Hindu University, Varanasi November 28-30, 2005

Recent Trends in Fluorescence Spectroscopy and its Applications, Kumaun University, Nainital Dec. 1-3, 2005

National Symposium on Spectroscopy and its applications, Indian Association for the Cultivation of Science, Kolkata, January 18-20, 2006

Frontiers in Chemistry workshop, Department of Chemistry, Government Model Science College, Jabalpur, Sep. 15-16, 2006

IUPAC Discussion Meeting on Hydrogen Bond, Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore, Sep. 18, 2006

National Symposium on, "Advances in Chemistry and Environmental Impact", Department of Chemistry, North-Eastern Hill University, Shillong, November 2-3, 2006

7th Asian International Seminar on Atomic and Molecular Physics, Indian Institute of Technology Madras, Chennai, December 4-7, 2006

Theoretical Chemistry Symposium 2006, Bharathidasan University, Tiruchirappalli, Dec. 11-13, 2006

Indian National Science Congress, Annamalai University, Annamalainagar, Jan. 5-7, 2007

Discussion meeting on Spectroscopy and Dynamics of Molecules and Clusters, Corbett National Park, Uttaranchal, Feb. 23-25, 2007.

Reach2007, Timber Trails, Himachal Pradesh, March 7-10, 2007

Indo-German Symposium, Indian Institute of Chemical Technology, Hyderabad, September 2007

JNC Frontier Lectures, Gurunanak Dev University, Amritsar, October 24-26, 2007

Indo-German Symposium on Frontiers in Chemistry, IIT Kanpur Kanpur October 26-28, 2007

SERC School, NIPER, Mohali, June 30, 2008

International Conference and Humboldt Kolleg on Stutcutural characterization and spectroscopy of materials relevant to nanotechnology, biomedical and geobiology, Banaras Hindu University, Varanasi, November 6-9, 2008

1st Inter IISER Chemistry Meet 2008, Indian Institute of Science Education and Research, Pune, December 22-23, 2008

Guru Nanak Dev University, Amritsar,

Punjab Science Congress, Punjab Agricultural University, Ludhiana, February 7, 2009

Discussion meeting on Crystal Engineering and Noncovalent Interactions: Contemporary themes and futuristic developments, Orange County, Coorg, February 22-25, 2009

India-Japan Workshop on Frontiers in Molecular Spectroscopy and Theory, Indian Association for the Cultivation of Science, Jadavpur, Kolkata, March 7-9, 2009

Atoms and molecules in a confined environment, Foundation Day Lecture, Institute for Microbial Technology, Chandigarh, Sep. 26, 2009

UG Projects: curiosity Driven Science, IISER Bhopal, November 1, 2009

Curiosity driven science, CSIO, Chandigarh, November 30, 2009

Atomic and Molecular clusters: The story of a fruitful collaboration, Invited Lecture in the Symposium on Changing Paradigms in Theoretical and Computational Chemistry: From Atoms to Molecular Clusters, Department of Chemistry, University of Pune, Pune Dec. 18-20, 2009

Structural motifs and shapes of atomic and molecular clusters, Invited Leccture in the Symposium, "Of Molecules and Materials (A survey of recent concepts)", IISER Kolkata, Dec. 28-29, 2009

Stacking and spreading interaction in N-heteroaromatic systems, Invited Lecture in Inter IISER Meet in chemistry IISER Kolkata Dec. 30-31, 2009

Playing with the buckyball, Inaugural Address at the 3rd Winter School on Nanotechnology in drug delivery, National Institute of Pharmaceutical Education and Research, Mohali, February 7, 2010

Playing with the buckyball, SASE, Chandigarh, February 28, 2010

Playing with the buckyball, Department of Chemistry, Panjab University, Chandigarh, Sep. 13, 2010

IITK should be No. 1 again! REACH Symposium, IIT Kanpur, Kanpur Oct. 10-12, 2010

Playing with the buckyball, Theoretical Chemistry Symposium, IIT Kanpur, December 8-12, 2010

Curiosity driven science, INSPIRE camp, University of Kashmir, Srinagar, July 27, 2011

Playing with the buckyball, ATOMS2011, Indian Institute of Chemical Technology, Hyderabad, November 2, 2011

Chemistry: melting boundaries, International Year of Chemistry, National Chemical Laboratory, Pune, Nov. 24, 2011

Structural motifs and shapes of atomic and molecular clusters, International Conference on Innovations in Chemistry for Sustainable Development, Panjab University, Dec. 1, 2011

Structural motifs and shapes of atomic and molecular clusters, Celebration of Chemistry, IIT Kanpur, Dec. 4, 2011

A Mirchi Story: Curiosity Driven Science, INSPIRE Camp, University of Jammu, January 20, 2013

Pentagons and hexagons, Chennai Chemistry Conference 2013, CLRI, Chennai, Feb. 8, 2013

Pentagons and hexagons, New Frontiers in Chemistry, Punjabi University, Patiala, Feb. 16, 2013

Back to the basics: the case of diatomic anions, An international conference on electronic structure and dynamics of molecules and clusters, IACS, Kolkata, Feb. 17-20, 2013

From our garden back to the Gondwana land, Science City, Kapurthala, Feb. 28, 2013

Bowls, balls and sheets: five and six-fold symmetry, Punjab University, March 2, 2013

Pentagons and hexagons in bowls, balls, sheets and flowers, IISER Bhopal, March 15, 2013

Pentagons and hexagons in bowls, balls, sheets, tubes and flowers, Chemistry Department, Mahatma Gandhi University, Kottayam, March 25, 2013

Bowls, balls and sheets: five and six-fold symmetry, Symposium on Theoretical and Computational Chemistry Frontiers & Challenges, Bharathidasan University, Tiruchirapalli, June 14-15, 2013

From molecules to materials: challenges and opportunities in computational chemistry, International conference on "Computational and data intensive science", CSIR Fourth Paradigm Institute, Bangalore, August 26-28, 2013

From atomic and molecular clusters to floral symmetry: the role of pentagons and hexagons, CF-2013: Chemical Frontiers, Goa, August 28-30, 2013

Indian Institutes of Science Education and Research (IISERs): An Indian Experiment in Science Education and Research, 2nd Summit of the South Asian Academy of Sciences, Indian National Science Academy, New Delhi, Sep. 25, 2013

Floral Symmetry, Complex Systems: From Physics to Biology, Jawaharlal Nehru University, New Delhi, Oct. 15-16, 2013

Symmetry and beauty of the floral world around us, Foundation Day Lecture, CSIO, Chandigarh, Oct. 30, 2013

Stacking and spreading interaction in molecular materials, International Conference on Interdisciplinary Areas with Chemical Sciences (ICIACS 2013), Panjab University, November 1, 2013

Back to the Basics: the Case of Diatomic Anions, 50th Annual Convention of Chemists, Department of Chemistry, Panjab University, Chandigarh, December 5, 2013

IISERs: An Indian Experiment in Science Education and Research, NIAS-DST training programme on "Policy for Science and Science for Policies", Bangalore, December 19, 2013

IISERs: An Indian Experiment in Science Education and Research, SPSTI meeting on higher education in 21st century, Chandigarh, February 19, 2014

Symmetry in chemistry and the floral world, Spectroscopy and dynamics of molecules and clusters, Puri, Feb. 20-23, 2014

Structural motifs in chemistry and chemical biology, IV National Symposium on Advances in Chemical Sciences, GNDU, Amritsar, Feb. 27-28, 2014

Symmetry in chemistry and chemical biology, Academy Workshop on Recent Advances in Materials Science, Bharathidasan Institute of Technology, Anna University, Tiruchirapalli, March 8, 2014

Symmetry in chemistry and chemical biology, National Symposium on Chemistry, Aligarh Muslim University, Aligarh, March 22, 2014

Structural motifs in chemistry and chemical biology, National Conference on Mastering in Molecules and Materials (M^3-2014), NIT Kurukshetra, October 16-17, 2014

Symmetry and pattern formation in flowers, International Symposium on Advances in Spectroscopy and Ultrafast Dynamics, IACS, Kolkata December 12-14, 2014

Back to the basics: the case of certain diatomics, Theoretical Chemistry Symposium, NCL Pune, Dec. 18-20, 2014

(i) Probing molecules in real time and space and (ii) Structural motifs in chemistry, Academy Workshop on New Frontiers in Chemistry, Govt. Periyar Arts College, Cuddalore Jan. 29-30, 2015

Atoms and molecules in a confined environment, Academy Workshop on Current Trends in Chemistry, Varanasi Feb. 20, 2015

Noncovalent interactions and structural motifs in chemistry and chemical biology, JSPS-DST Asian Academic Seminar and School, IACS and IISER Kolkata, March 6-10, 2015

Symmetry and Pattern Formation in Flowers, Indian Academy of Sciences, Bangalore July 4, 2015

Symmetry and Pattern Formation in Flowers, INSPIRE meeting, Pandit Ravishankar Shukla University, Raipur July 27, 2015

Back to the basics: certain diatomics and triatomics, IISER Kolkata, January 28, 2016

Symmetry and Pattern Formation in Flowers, Sir J C Ghosh Memorial Lecture, Department of Chemistry, IIT Kharagpur, February 9, 2016

Symmetry and Pattern Formation in Flowers, Multani Mal Modi College, Patiala, February 19, 2016

Symmetry and Pattern Formation in Flowers, SASTRA University, Thanjavur, February 28, 2016

Structural motifs in chemistry and chemical biology, Anna University, Chennai, March 12, 2016

Non-adiabatic interactions and geometric phase, Recent Advances in Theoretical Chemistry, IISc, Bangalore, July 8-9, 2016

Institution building: the story of IISERs, Foundation Day Lecture, NISER, Bhubaneswar, September 6, 2016

Institution building: the story of IISERs, Biology Day Lecture, IIT Kanpur, September 24, 2016

CV Raman Medal (2016) Lecture on ***Atoms and Molecules in a Confined Environment,*** Annual General Meeting of the Indian National Science Academy, NISER, Bhubaneswar, December 29, 2016

Atoms and molecules in a confined environment, HansRaj Mahila Maha Vidyalaya, Jalandhar, January 16, 2017

Non-adiabatic interactions and geometric phase, Guru Nanak Dev University, Amritsar, January 27, 2017

Non-adiabatic interactions and geometric phase, Recent Advances in Multi-Electron Theory, Goa, February 9-12, 2017

Atoms and Molecules in a Confined Environment, 5^{th} Modeling of Chemical and Biological (Re)activity, CLRI, Chennai, Feb. 18-21, 2017

Institution Building: the Story of IISERs, IISER Mohali, February 25, 2017

Symmetry and Pattern Formation in Flowers, Science Day, IIT Roorkee, February 28, 2017

Atoms and Molecules in a Confined Environment, Foundation Day Lecture, INST, Mohali, March 2, 2017

Symmetry and Pattern Formation in Flowers, DST-Max-Planck-Partner group meeting, IISER Mohali, March 4, 2017

Curiosity Driven Science: from our garden back to the Gondwana land, K S Krishnan Lecture, GS Hindu High School, Srivilliputtur, July 4, 2017

Chintan Shivir, Current Status of Higher Education in India, IISER Bhopal, November 3, 2017

Symmetry and Pattern Formation in Flowers, Vijyoshi 2017, IISER Kolkata December 11, 2017

Atoms and molecules in a confined environment, 22nd CRSI National Symposium, Pt. Ravishankar Shukla University, Raipur Feb. 1-4, 2018

Atoms and Molecules in a confined environment, SDMC2018, Dooars, February 15-18, 2018

Atoms and Molecules in a confined environment, International Conference on Systems and Processes in Physics, Chemistry and Biology, Assam University, Silchar, March 1-3, 2018

Symmetry and Pattern Formation in Flowers – a multi-disciplinary approach, INSPIRE Programme, Panjab University, Chandigarh, March 28, 2018

Atoms and Molecules in a Confined Environment, Colloquium at IISER Tirupati, August 17, 2018

Academy lecture workshop on quantum chemistry and spectroscopy, SGGS Khalsa college, Mahilpur, September 28-29, 2018

Stabilising influence of silicon on benzene dimer and its isomers, International conference on frontiers at the chemistry – allied sciences interface, University of Rajasthan, Jaipur, December 21-22, 2018

The chemical bond, Modern trends in chemical sciences including green chemistry, SRM University, Chennai, December 27, 2018

Blue shifts due to confinement, Madurai Kamaraj University, Madurai, January 4, 2019

Some aspects of the carbon family, 24th CRSI National Symposium in Chemistry, CSIR-CLRI, Chennai, February 8, 2019

Atoms and molecules in a confined environment, International conference on chemical sciences and nanomaterials, VIT Vellore, March 9, 2019

Passion Flower: A Chemist's View, K K Balasubramanian Endowment Lecture, IIT Madras, April 2, 2019

Atoms and molecules in a confined environment, IACS, Kolkata, April 12, 2019

The Chemical Bond, Ramakrishna Mission Swami Vivekananda Centenary College, Kolkata June 20, 2019

Time Dependent Quantum Mechanical Wave Packet Dynamics, Summer School on Quantum Information and Quantum Technology, IISER Kolkata, June 21-22, 2019

Observing Chemical Reactions in Space and Time: Pushing the Frontiers of Science, Christ University, Bengaluru, July 12, 2019

Elementary Chemical Processes, 25th CRSI National Symposium in Chemistry, IIT Kanpur, July 19, 2019

Curiosity driven science, P C Ray Memorial Lecture, NIIST, Thiruvananthapuram, August 2, 2019

26th CRSI National Symposium in Chemistry, VIT Vellore, Feb. 2020

SDMC Udaipur

Puri March 2020

Quantum Dynamics, IISER Kolkata, July 3, 2021

Rates of elementary chemical reactions, July 16, 2021
Science in our backyard, Resonance 2021, Indian Academy of Sciences, August 2, 2021

In the beginning it was helium, hydrogen and a bit of lithium, Tamilnadu Academy of Sciences, Chennai July 17, 2021

The Story of IISERs (There are seven of them) SPSTI, Sep. 5, 2021

The Beginning of Chemistry - in the Early Universe, R C Sobti, Sep 6, 2021

The beginning of chemistry, Farook College, October 29, 2021

Ab initio dynamical investigation of rotational excitation/de-excitation in HeH^+ due to collision with He and H_2, 17th Theoretical Chemistry Symposium (TCS-2021), IISER Kolkata, Dec. 11-14, 2021

Learning Science from the Kitchen Garden (or from the backyard or from the neighbourhood), NCERT Jan. 12, 2022

Chemistry in the early universe, M S University Baroda, February 18, 2022

National Conference on Molecular Modelling and Simulations (NCMMS 2022), Bhopal campus of the VIT University, February 28 - March 02, 2022

AI/ML Methods in Chemical Dynamics, IACS, Kolkata, May 26-28, 2022

AI/ML Methods in Chemical Dynamics, IISER Kolkata, August 24, 2022

Learning Science from the Kitchen Garden, NISER Bhubaneswar, Sep. 16, 2022

AI/ML Methods in Chemical Dynamics, CTTC-2022, BARC Mumbai, Sep. 22-24, 2022

Rotationally inelastic scattering in HeH^+-He/H_2 collisions, Spectroscopy and Dynamics of Molecules and Clusters, Malpe beach, Karnataka, Nov. 10-13, 2022

AI/ML Methods in Chemical Dynamics, RAC 2022, NIT Meghalaya, Shillong, Nov. 18-20, 2022

Synchronous pulsed flowering and pattern formation in individual flowers of *Passiflora incarnata* (Passion Flower), DCC 2022, IACS Kolkata, Dec. 3, 2022

Chemistry in the Early Universe, Annual Convention of Chemists, Indian Chemical Society, IIT(ISM) Dhanbad, Dec. 16, 2022

Chemistry in the Early Universe, SRM Univ. Chennai, January 9, 2023

AI/ML Methods in Chemical Dynamics, EESTER-2023, IIT Madras, January 11, 2023

AI/ML Methods in Chemical Dynamics, iCURE2023, Madurai Kamaraj University, February 6, 2023

Chemistry in the Early Universe, Department of Chemistry, IIT Bhilai, Feb. 28, 2023

Chemistry in the Early Universe, Department of Chemistry, IIT Patna, March 29, 2023

Artificial neural networks in chemical dynamics, Kalinga Institute of Technology, Bhubaneswar, Sep. 5, 2023

(He, H_2^+) Dynamics on 2-State Diabatic Potential Energy Surfaces, Structure and Dynamics: Spectroscopy and Scattering (SDSS-2023), IACS, Kolkata, Oct. 5-8, 2023

Quantum Dynamics of Rotationally Inelastic HeH^+-H_2 Collisions on an Accurate Ab Initio Potential Energy Surface, 26th International workshop on quantum systems in chemistry, physics and biology (QCSP-XXVI), Jaipur, Oct. 14-20, 2023.

Non-adiabatic interaction in (He, H_2^+) Dynamics, Advances in Spectroscopy and Dynamics, IISc, Bengaluru, November 4, 2023

Non-adiabatic interaction in (He, H_2^+) Dynamics, International Conference on Molecular Energy Transfer in Complex Systems (iCOMET 2023), Jaipur, Nov. 12-17, 2023

Potential Energy Surfaces and Chemical Dynamics, IISER Thiruvananthapuram, January 17-23, 2024

Passionflower, Punjabi University, Patiala, February 7, 2024

Passsionflower, IISER Mohali, February 8, 2024

Cations and Anions in Interstellar Media, IISER Mohali, February 9, 2024

Spectral characteristics of the Flavones and Anthocyanins Present in Passionflower (*Passiflora incarnata*), SDMC, Kaziranga, Feb. 22-25, 2024

Curiosity driven science: the case study of Passionflower, National Science Day, Manipal University, Jaipur, February 28, 2024

Curiosity driven science: the case study of Passionflower, National Science Day Festival, Ashoka University, Sonipat, March 1, 2024

Quasi-classical Trajectory Calculations on a Two-state Potential Energy Surface Including Nonadiabatic Coupling Terms as Friction for $D^+ + H_2$ Collisions, Physical Chemistry Symposium 2024, IIT Bombay, October 22-25, 2024

Intriguing Features of Passionflower (*Passiflora incarnata*): A spectrochemical study, International Conference on Ultrafast Nonlinear Optics and Optical Spectroscopy (UNOOS), IISER Mohali 10-12 December 2024.

Anions in interstellar media, Physics and Chemistry of Atomic, Molecular and Condensed Matter Systems, IISER Kolkata, December 11-14, 2024

Anion-molecule collisions at low temperatures of interest in interstellar media, SRAPCR, IACS Kolkata, April 11, 2025

The possibility of forming $H_2(T_2)$ in its lowest energy triplet electronic state, Somaiya Vidyavihar University, Mumbai, June 9-10, 2025

AI/ML Methods in Chemical Dynamics, National Scientists Round Table Conference, MIT-WPU, Pune, July 19, 2025

AI/ML Methods in Chemical Dynamics, FACTS2025, Ashoka University, Sonipat, August 1-3, 2025

Going beyond three dimensions in ab initio chemical dynamics, ACS Global Virtual Meet, August 18, 2025

Chemistry: A BIG DATA Science, International Conference on New Dimensions in Chemical Sciences and Education, Somaiya Vidyavihar University, Mumbai, Sep. 11-13, 2025

Going beyond three dimensions in ab initio chemical dynamics, SoPhysChem, IIT Patna, Oct. 11-13, 2025

The Hydrogen Molecule, SDMC, Nagpur February 19-22, 2026

Science and India, Banaras Hindu University, Varanasi, February 28, 2026

Non-adiabatic interactions in chemical dynamics, Emerging trends in photodynamics and photochemistry (ETPP), IISER Mohali, March 12-14, 2026

AI/ML methods in chemical dynamics, IIT Delhi, March 16, 2026

Abroad

INDO-Japan workshop on spectroscopy and dynamics, Kobe, Japan September 25-27, 2006

Stacking and spreading interaction in N-heteroaromatic systems, Invited Lecture in the 2nd Indo-German Symposium on “Modeling Chemical and Biological (Re)activity, Wildbad Kreuth, Germany, October 4-7, 2009

Playing with the buckyball, XVIII European Conference on Dynamics of Molecular Systems, Curia/Andia, Portugal, September 5-10, 2010

(i)Indian Initiatives in Science Education, (ii) Chemistry: melting boundaries, Nepal Academy of Science and Technology, Kathmandu, April 7-8, 2011

Indian Initiatives in Science Education, Bangladesh Academy of Sciences, Dhaka, Bangladesh, May 9, 2011

Playing with the buckyball, Qaide Azam University, Islamabad, Pakistan, January 2012

Non-adiabatic interaction and the geometric phase, Jerusalem Nonadiabatica 2018, Hebrew University, Jeruasalem, Israel, March 12-15, 2018

Non-adiabatic interaction and the geometric phase in triatomic systems, Symposium on Molecular Quantum Mechanics: From Biology to Astrophysics via Chemistry and Physics, Univ. Innsbruck, Innsbruck, March 22-23, 2019

Seminars: India

School of Chemistry, University of Hyderabad March 10, 1982

National Chemical Laboratory, Pune December 7-8, 1983

Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore December 1-3, 1984

N.V. Subbarao Memorial Lecture, Department of Chemistry, Osmania University, Hyderabad March 22, 1988

School of Chemistry, Madurai Kamaraj University Sep. 30, 1989

National Chemical Laboratory, Pune Jan. 23, 1991

Department of Chemistry, Gorakhpur University, Jan. 18, 1992

Department of Chemistry, Univ. Roorkee, March 13, 1992

Regional Research Laboratory, Trivandrum, March 16-17, 1992

Department of Chemistry, Univ. Jammu March 30, 1992

Department of Chemistry, Banaras Hindu University, Varanasi, April 4, 1992

Central Leather Research Institute, Madras May 1995

Regional Research Laboratory, Trivandrum Dec. 4, 1996

Department of Chemistry, Panjab University, Chandigarh, August 2, 1999

R. P. Mitra Memorial Lecture, Department of Chemistry, Delhi University, Delhi Feb. 14, 2002

Department of Chemistry, Guru Nanak Dev University, Amritsar, 2003

Department of Chemistry, Gorakhpur University, Gorakhpur, Nov. 23-24, 2002

Department of Physics, Banaras Hindu University, Varanasi, 2004

Department of Chemistry Banaras Hindu University, Varanasi, August 2004

Department of Physics, Kumaun University, Nainital December 5, 2005

School of Chemistry, University of Hyderabad, Hyderabad March 14, 2006

Tata Institute of Fundamental Research, Mumbai October 11, 2006

Department of Chemistry, Indian Institute of Technology Guwahati, Guwahati, May 2007

Physical Research Laboratory, Ahmedabad December 12, 2007

INSA local chapter, Department of Chemistry, Panjab University, Chandigarh January 24, 2008

Department of Chemistry, National Institute of Technology, Jalandhar, Sept. 29, 2008

Structural motifs in chemistry and chemical biology, NISER, Bhubaneswar, Feb. 20, 2014

Cations and Anions in Interstellar Media, IISER Kolkata, Oct. 04, 2023

Potential energy surfaces and chemical dynamics, IISER Thiruvananthapuram, Jan. 17-23, 2024

Passionflower, Department of Chemical Sciences, IISER Mohali, Feb. 8, 2024

Cations and Anions in Interstellar Media, IISER Mohali, Feb. 9, 2024

Curiosity driven science: the case study of passionflower, Manipal University, Jaipur, Feb. 28, 2024

Seminars: Abroad

Hahn-Meitner Institut, Berlin August 30, 1982

Max-Planck-Institut fuer Stroemungsforschung, Goettingen FRG September 6, 1982

Department of Chemistry, University of Toronto, Toronto Canada February 1983

Chemistry Division, National Research Council, Ottawa, Canada April 22, 1983

Department of Chemistry, Oklahoma State University, Stillwater OK USA June 22, 1984

Institut fuer Physikalische Chemie der Universitaet Wuerzburg, FRG June 30, 1986

Fakultaet fuer Physik, Universitaet Bielfeld, FRG October 17, 1986

Fakultaet fuer Physik, Universitaet Kaiserslautern, FRG October 30, 1986

Max-Planck-Institut fuer Stroemungsforschung, Goettingen FRG November 5, 1986

Hahn-Meitner-Institut, Berlin April 27, 1987

H.C. Oersted Institut, Univ. Copenhagen, Denmark May 18, 1987

Department of Chemistry, Penn. State University, USA October 10, 1988

Surface Science Division, National Institute of Standards and Technology, Gaithersburg, USA October 12, 1988

Institut fuer Festkoerperphysik, Kernforschunganlage, Juelich, FRG May 19, 1989

Facultaet fuer Physik, Albert-Ludwigs-Universitaet, Freiburg, FRG May 31, 1989

Department of Chemistry, State Univ. of New York, StonyBrook, New York, USA, July 3, 1989

Department of Chemistry, Stanford University, Stanford, Ca, USA, July 14, 1989

Surface Science Division, National Inst. Standards and Technology, Gaithersburg, Md, USA June 6, 1990

Dipartimento di Chimica, Universita di Roma, Italy June 19, 1990

Dipartimento di Chimica, Universita di Perugia, Italy June 22, 1990

National Institute of Standards and Technology, Gaithersburg, Md, USA July 7, 1994

Institut fuer Physikalische und Theoretische Chemie, Freie Universitaet Berlin, Berlin, Germany, April 23, 1996

Fachbereich Chemie, Universitaet Potsdam, Potsdam, Germany, April 23, 1996

Graduate School of Human Informatics, Nagoya University, Nagoya, Japan October 24, 1996

Institute of Molecular Science, Okazaki, Japan, Oct. 30, 1996

Department of Chemistry, Tohoku University, Sendai, Japan, Nov. 1, 1996

Faculty of Engineering, Tokyo University, Hongo, Japan, Nov. 6, 1996

National Institute of Standards and Technology, Gaithersburg Md, USA June 11, 1997

Department of Chemistry, Northwestern University, Evanston, Il, USA June 18, 1997

Departimento di Chimica, Universita di Roma, Italy, May, 2000

Dipartimento dic Chimica, Universita di Perugia, Italy, May 2000

Department of Chemistry, University College, London, UK Nov. 30 – Dec. 1, 2000

Department of Chemistry, University of Oxford, Oxford, UK Dec. 4, 2000

Department of Chemistry, University of Cambridge, Cambridge, UK Dec. 6, 2000

Department of Chemistry, University of Bristol, Bristol, UK Dec. 8, 2000

Department of Chemistry, University of Manchester, Manchester, UK Dec. 12, 2000

Department of Chemistry, University of Liverpool, Liverpool, UK Dec. 14, 2000

Department of Chemistry, California Institute of Technology, Pasadena, Ca, USA, Jan. 10, 2001

Inst. f. Theoretische u. Physikalische Chemie, Univ. Frankfurt, Germany, May 2, 2005

Inst. f. Theoretische Chemie, Univ. Heidelberg, Germany, May 4, 2005

Lehrstuhl f. Theoretische Chemie, Technische Uni. Muenchen, Germany, May 6, 2005

Fachberei Physik, Univ.Chemnitz, Germany, May 10, 2005

Inst. f. Physikalische Chemie, Univ. Siegen, Germany， May 13, 2005

Atoms and Molecules in a confined environment, Ecole Normale Superiure, Ulm, Paris, June 29, 2017

Structural Motifs in Chemistry and Chemical Biology, School of Environmental Sciences, Saitama University, Saitama, Japan August 8, 2017

Structural Motifs in Chemistry and Chemical Biology, Institute of Organic chemistry and Biochemistry, Prague, October 25, 2017

Atoms and Molecules in a confined environment, Department of Chemistry, Univ. Miami, Miami, USA, Oct. 11, 2019

Institution Building, Department of Chemistry, Univ. Miami, Miami, USA, Oct. 11, 2019

Atoms and Molecules in a confined environment, Centre for Computational Quantum Chemistry, Univ. Georgia, Athens, Georgia, Oct. 16, 2019

Publications of Dr. N. Sathyamurthy

1. Quasiclassical trajectory studies using 3D spline interpolation of ab initio surfaces,
N. Sathyamurthy and L. M. Raff, J. Chem. Phys. **63**, 464-473(1975).

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G. E. Kellerhals, N. Sathyamurthy and L. M. Raff, J. Chem. Phys. **64**, 818-825(1976).

3. Quantum mechanical scattering studies using 2D spline interpolation of a potential-energy surface,
N. Sathyamurthy, G. E. Kellerhals and L. M. Raff, J. Chem. Phys. **64**, 2259-2261(1976).

4. Reactive scattering calculations on a spline-fitted ab initio surface: He + $H_2^+ \rightarrow HeH^+$ + H reaction,
N. Sathyamurthy, R. Rangarajan and L. M. Raff, J. Chem. Phys. **64**, 4606-4611(1976).

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7. On the origin of the dynamical differences on the diatomics-in-molecules and spline-fitted ab initio surfaces for the He + H_2^+ reaction,
N. Sathyamurthy, J. W. Duff, C. Stroud and L.M. Raff, J. Chem. Phys. **67**, 3563-3569(1977).

8. Rotational energy transfer (Theory) I. Comparison of quasiclassical and quantum mechanical results for elastic and rotationally inelastic HCl-Ar collisions,
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J. C. Polanyi and N. Sathyamurthy, J. Phys. Chem. **83**, 978-983(1979).

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I. NoorBatcha and N. Sathyamurthy, Chem. Phys. Letters **79**, 264-268(1981).

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C. P. Shukla, A. K. Bachhawat and N. Sathyamurthy, Chem. Phys. **70**, 83-91(1982).

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34. Fitting repulsive potential-energy curves and surfaces,
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P. M. Agrawal, V. Mohan and N. Sathyamurthy, Chem. Phys. Letters **114**, 343-347(1985).

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K. Raghavan, S. K. Upadhyay, N. Sathyamurthy and R. Ramaswamy, J. Chem. Phys. **83**, 1573-1577(1985).

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