

BIODATA

Name: Narayanasami Sathyamurthy

Born: July 10, 1951

Position: Director, Indian Institute of Science Education and Research Mohali
(June 2007 – present)

Address: IISER Mohali, Sector 81, SAS Nagar, Manauli PO 140306, Punjab

Telephone: +91-172-2240266(office); -2240113 (residence)

Telefax: +91-172-2240266

Email: nsath@iitk.ac.in; nsath@iisermohali.ac.in

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 – present

Institute Chair Professor, Indian Institute of Technology Kanpur, Kanpur 2007 - present

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-

Awards and Honours:

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
Honorary Professor, S. N. Bose National Center for Basic Sciences, Calcutta 1995-98
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
Honorary Professor, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore 2000-2002; 2007 - 2017
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-
Institute Fellow, IIT Kanpur, 2013

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 Mozumder 2013

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

Member, Editorial Board, Proceedings of 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, International Journal of Theoretical and Computational Chemistry, World Scientific, 2002-

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

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

Member, Editorial Board, European Physics Journal D, 2010-2015

Member, Editorial Board, Current Science, 2015-

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 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 Structural 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 Lecture 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 (M³-2014), 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

Probing molecules in real time and space and 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

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, Quaid Azam University, Islamabad, Pakistan, January 2012

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

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, Kernforschungsanlage, 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

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

Dipartimento di 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

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

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

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).
2. Comparison of quantum mechanical and quasiclassical scattering as a function of surface topology, 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: $\text{He} + \text{H}_2^+ \rightarrow \text{HeH}^+ + \text{H}$ reaction, N. Sathyamurthy, R. Rangarajan and L. M. Raff, J. Chem. Phys. **64**, 4606-4611(1976).
5. Inelastic scattering calculations in polyatomic systems using an ab initio intermolecular potential-energy surface: The $\text{CO}_2(0,0,1,0) + \text{H}_2(\text{D}_2) \rightarrow \text{CO}_2(0,0,0,0) + \text{H}_2(\text{D}_2)$ system, N. Sathyamurthy and L. M. Raff, J. Chem. Phys. **66**, 2191-2211(1977).
6. Quantum mechanical scattering calculations on a spline-fitted ab initio surface: The $\text{He} + \text{H}_2^+ (v = 0, 1, 2) \rightarrow \text{HeH}^+ + \text{H}$ reaction, C. Stroud, N. Sathyamurthy, R. Rangarajan and L.M. Raff, J. Chem. Phys. Letters **48**, 350-353(1977).
7. On the origin of the dynamical differences on the diatomics-in-molecules and spline-fitted ab initio surfaces for the $\text{He} + \text{H}_2^+$ 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, J. C. Polanyi, N. Sathyamurthy and J. L. Schreiber, Chem. Phys. **24**, 105-110(1977).
9. Rotational energy transfer (Theory) II. HCl + He, Ar, J. C. Polanyi and N.Sathyamurthy, Chem. Phys. **29**, 9-29 (1978).
10. Location of energy barriers VII. Sudden and gradual late-energy barriers, J. C. Polanyi and N. Sathyamurthy, Chem. Phys. **33**, 287-304(1978).
11. Effect of potential-well in an endothermic system: Reactive and vibrationally inelastic $\text{He} + \text{H}_2^+$ collisions, N. Sathyamurthy, Chem. Phys. Letters **59**, 95-99(1978).
12. Rotational energy transfer (Theory) III. HCl + HCl,

- J. C. Polanyi and N. Sathyamurthy, *J. Phys. Chem.* **83**, 978-983(1979).
13. Location of energy barriers VIII. Reagent \rightarrow Product energy conversion on surfaces with sudden or gradual late-barriers,
J. C. Polanyi and N. Sathyamurthy, *Chem. Phys.* **37**, 259-264(1979).
14. Reaction rate, rate constant and activation energy,
N. Sathyamurthy, *Indian J. Chem. Edn.* **6**(2), 1-4(1979).
15. Inelastic scattering calculations in polyatomic systems using an ab initio intermolecular potential-energy surface II. Rotational energy transfer in CO₂-H₂ collisions,
N. Sathyamurthy and L. M. Raff, *J. Chem. Phys.* **72**, 3163-3178(1980).
16. Exponential gap relation and the rotational inelasticity of H₂-M systems,
C. Gayatri and N. Sathyamurthy, *Chem. Phys.* **48**, 227-235(1980).
17. Molecular collisions and chemical reactions,
N. Sathyamurthy, *Sci. Acad. Medal for Young Scientists - Lectures 1980*, 17-20.
18. Negative activation energy for the Cl(Br)O + NO \rightarrow Cl(Br)O + NO₂ reactions,
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