

CURRICULUM VITAE

(C3)

Personal/CV VAGU-C3 (25.04.2013)

Name van Gunsteren, Willem F.
Date of birth August 7, 1947
Place of birth Wassenaar, The Netherlands
Nationality Dutch
Sex male
Civil Status married, two children



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Education

| <i>Institution</i> | <i>Degree</i> | <i>Year</i> | <i>Scientific Field</i> |
|----------------------------|---------------|-------------|-------------------------|
| Free University, Amsterdam | B.Sc. | 1968 | Physics |
| Free University, Amsterdam | Meester | 1974 | Law |
| Free University, Amsterdam | Ph.D. | 1976 | Nuclear Physics |
| University of Groningen | (Postdoc) | 1976-1978 | Molecular Physics |
| Harvard University | (Postdoc) | 1978-1980 | Molecular Physics |

Honors

- Doctorate Cum Laude (1976)
- Royal Dutch - Shell Prize for Doctoral Research (1975)
- Royal Dutch Union of Chemists gold medal for research (1987)
- Degussa - Stiftungsgastprofessur für Chemie und Medizin, Johann Wolfgang Goethe - Universität, Frankfurt (1988)
- Visiting Professor, University of Science and Technology of China, Hefei (1993-1997)
- Corresponding member, Royal Dutch Academy of Arts and Sciences (1995)
- 73th Priestly Lecturer Penn State University (1999)
- Visiting Professor, University of Florence (2000)
- 10th Huygens Lecturer Dutch Science Foundation (2001)
- Visiting Professor, University of Leiden (2002)
- Max-Planck Forschungspreis für Chemie und Pharmazie (2002)
- Visiting Professor, École Normale Supérieure, Paris (2007)
- Distinguished Lecturer, CMMS, University of Pittsburgh (2009)
- Golden Tricycle award for most family friendly group leader, ETH Zurich (2009)
- Visiting Professor, University of Natural Resources and Life Sciences, Vienna (2015)

Major research interest

Development of methodology to simulate the behaviour of biomolecular systems

Research and/or Professional Experience

- March 1980 - May 1987 Senior Lecturer, Department of Physical Chemistry, University of Groningen, The Netherlands
- May 1987 - Sept. 1990 Professor of Physical Chemistry, University of Groningen, The Netherlands
- Sept. 1987 - Aug. 1992 Professor of Computational Physics, Free University, Amsterdam, The Netherlands
- Nov. 1987 - Sept. 1988 Sabbatical leave, University of California, San Francisco, USA
- Sept. 1990 - Jan. 2013 Professor of Computer-Aided Chemistry, ETH Zürich, Zurich, Switzerland
- March 1997 - Oct. 1997 Sabbatical leave, University of Oxford, Oxford, U.K.
- Jan. 2013 - Professor Emeritus, ETH Zürich, Zurich, Switzerland
- Apr. 2014 - 2018 Ombudsman ETH Zürich, Zurich, Switzerland

Teaching duties

courses on

- Mathematical and Computational Methods in Chemistry
- Statistical Mechanics
- Computational Physics
- Advanced Programming
- Computer Science
- Computer Simulation in Chemistry, Biology and Physics

supervised PhD theses: 48

Organisational experience and duties

- *September 1982*
one of two organisers of a three-week workshop on nucleotide binding to proteins (15 participants) at CECAM, University of Paris IX, Orsay, France
- *May 1984*
one of two organisers of a one-week workshop on molecular dynamics and protein structure (140 participants) at the University of North Carolina, Chapel Hill, USA

- *September 1984*
one of two organisers of a three-day CECAM discussion meeting on the design of drugs and vaccines (35 participants) in Amersfoort, The Netherlands
- *August 1985*
organiser of a three-day CECAM discussion meeting on the calculation of free energy in macromolecular systems (17 participants) in Amersfoort, The Netherlands
- *1986 -*
Author and organiser of the Groningen Molecular Simulation (GROMOS) software for biomolecular simulation, which is used in hundreds laboratories in more than 60 countries on all continents.
- *1991 -*
organiser of the yearly international Biomos meeting on biomolecular simulation (30 - 40 participants) at Burg Arras, Germany, as of 2011 in Ausserberg, Switzerland
- *September 1992*
one of three organisers of a five-day workshop on protein folding and stability (51 participants) in Ascona, Switzerland
- *1993 - 2005*
Head Competence Centre for Computational Chemistry, Zurich
- *April 1993*
one of two organisers of a two-day CECAM discussion meeting on the generation of amorphous polymer structures (17 participants) at CECAM, Orsay, France
- *April 1994*
one of four organisers of a five-day workshop on membranes, theory, simulation and experiment (48 participants) in Ascona, Switzerland
- *1995 - 1997*
Head Institute of Physical Chemistry, ETH Zurich
- *1997 - 2005*
President Informatikkommission ETH Zurich
- *November 1997*
one of nine organisers of a three-day joint workshop of the GDCh and C4 ETHZ on the use of computers in chemistry (93 participants) in Männedorf, Switzerland
- *1997 -*
Delegate of the President of the ETH for nominations of professors
- *May 1999*
one of three organisers of a five-day workshop on computational sciences and engineering (80 participants) in Ascona, Switzerland
- *September 1999*
one of six organisers of a two-day conference on biomolecular structure, dynamics and function (172 participants) in Groningen, The Netherlands

- 2000 - 2002
Head Department of Chemistry, ETH Zurich (~40M Euro turnover)
- 2001
Responsible for festivities regarding the opening of the new chemistry laboratory of the ETH Zurich (~10'000 visitors)
- 2004 – 2014
Member of the University Council of the University of Vienna
- 2005
Responsible for 150th anniversary festivities of the Department of Chemistry and Applied Biosciences, ETH Zurich (~10'000 visitors)
- 2006-2008
Head Department of Chemistry and Applied Biosciences, ETH Zurich (~50M Euro turnover)
- 2006
Chair of the Gordon Research Conference on Computational Chemistry (one week with 150 participants) in Les Diablerets, Switzerland
- 2008 - 2013
Member Strategiekommission ETH Zurich
- 2009
Organiser of a symposium on computational science and engineering (140 participants) in Zurich, Switzerland
- 2014 -
Ombudsmann of the ETH Zurich

Scientific duties

- Member of the Editorial Board of the European Biophysical Journal
- Founder and Director of a software house for scientific computing software, Biomos b.v., since 1986
- Member of the Editorial Board of the journal Molecular Simulation
- Member of the Editorial Board of the Journal of Biomolecular NMR
- Member of the Editorial Board of the Journal of Computational Chemistry

Invited lectures

1982

- Biophysical Society (Oxford, U.K.)
- Burroughs Wellcome (London, U.K.)
- Rheinisch Westphalische Technische Hochschule (Aachen, Germany)
- University of Alberta (Edmonton, Canada)
- University of California (San Francisco, U.S.A.)
- University of North-Carolina (Chapel Hill, U.S.A.)

- Harvard University (Cambridge, U.S.A.)

1983

- Swedish Agricultural University (Uppsala, Sweden)
- Birkbeck College (London, U.K.)
- Rheinisch Westphalische Technische Hochschule (Aachen, Germany)

1984

- University of Science and Technology of China (Hefei, China)
- Polish Academy of Sciences (Warsaw, Poland)
- University of North Carolina (Chapel Hill, U.S.A.)
- Fysisch Laboratorium, R.U.U. (Utrecht, The Netherlands)

1985

- Institut Laue Langevin (Grenoble, France)
- University of Frankfurt (Frankfurt, Germany)
- Stichting Academisch Rekencentrum Amsterdam (Amsterdam, The Netherlands)
- KNCV (Twente, The Netherlands)
- Royal Swedish Academy of Sciences (Stockholm, Sweden)
- German and Swedish Biophysical Societies (Lübeck, Germany)
- New York Academy of Sciences (New York, U.S.A.)
- Du Pont (Wilmington, U.S.A.)
- KNAW (Amsterdam, The Netherlands)

1986

- Fysisch Laboratorium V.U. (Amsterdam, The Netherlands)
- Molecular Graphics Society (Cap d'Agde, France)
- International Union of Crystallography (Garmisch-Partenkirchen, Germany)

1987

- Molecular Graphics Society (York, U.K.)
- ICI (Macclesfield, U.K.)
- University of Frankfurt (Frankfurt, Germany)
- SON (Lunteren, The Netherlands)
- Material Science Center (Vlieland, The Netherlands)
- Colloquium de Protides (Brussels, Belgium)
- BIOSON (Groningen, The Netherlands)
- Gesellschaft Deutscher Chemiker (Baden-Baden, Germany)
- Unilever (Vlaardingen, The Netherlands)
- Shell (Amsterdam, The Netherlands)
- FEBS (Ljubljana, Yugoslavia)
- Max-Planck Institut für Biochemie (München, Germany)
- Freie Universität (Berlin, Germany)
- University of Minnesota (Minneapolis, U.S.A.)
- University of Science and Technology of China (Hefei, China)
- University of New South Wales (Sydney, Australia)
- Australian National University (Canberra, Australia)
- Ludwig Institute for Cancer Research (Melbourne, Australia)
- University of Chicago (Chicago, U.S.A.)
- Alliant (Princeton, U.S.A.)

1988

- KNCV (Amsterdam, The Netherlands)
- Bayer (Leverkusen, Germany)
- Florida State University (Tallahassee, U.S.A.)
- UCSD (San Diego, U.S.A.)
- Alliant (Amsterdam, The Netherlands)
- Int. School of Crystallography (Erice, Italy)
- Gordon Research Conf. on Comput. Chemistry (Plymouth, U.S.A.)

- 14th Biochemistry Congress (Prague, Czechoslovakia)
- Molecular Graphics Society (San Francisco, U.S.A.)
- CARB (Rockville, U.S.A.)
- NIH (Bethesda, U.S.A.)
- Du Pont (Wilmington, U.S.A.)
- Wyeth-Ayerst (Princeton, U.S.A.)
- Wesleyan University (Middletown, U.S.A.)
- State University (Utrecht, The Netherlands)
- BASF (Ludwigshafen, Germany)
- Swiss Crystallographic Society (Lausanne, Switzerland)
- Hoffmann-La Roche (Basel, Switzerland)
- Gesellschaft für Biotechnologische Forschung (Braunschweig, Germany)
- J.W. Goethe University (Frankfurt, Germany)
- Hoechst (Frankfurt, Germany)

1989

- University of Oxford (Oxford, U.K.)
- University of Cambridge (Cambridge, U.K.)
- CCP4/CCP5 Meeting, SERC (Daresbury, U.K.)
- Eidg. Technische Hochschule (ETH) (Zurich, Switzerland)
- University of Utrecht (Utrecht, The Netherlands)
- GERM XI (Bordeaux, France)
- Sandoz (Basel, Switzerland)
- ICSN (Gif sur Yvette, France)
- Bio-Expo 89 (Paris, France)
- Int. School of Crystallography (Erice, Italy)
- Alfred Benzon Symposium (Copenhagen, Denmark)
- 32nd IUPAC Congress (Stockholm, Sweden)
- CECAM Meeting (Ermelo, The Netherlands)
- German, Swiss, Austrian and Yugoslavian Biophysical Societies (Todtmoos)
- Alliant (Tokyo, Japan)
- CBI (Tokyo, Japan)
- Philips (Eindhoven, The Netherlands)
- Dutch Biophysical Society (Groningen, The Netherlands)
- Janssen Pharmaceuticals (Tilburg, The Netherlands)
- Technische Universität (München, Germany)
- SON (Lunteren, The Netherlands)

1990

- CECAM Meeting (Orsay, France)
- Rhône-Poulenc (Vitry, France)
- Agricultural University (Wageningen, The Netherlands)
- University of Houston (Houston, U.S.A.)
- Texas A&M University (College Station, U.S.A.)
- Howard Hughes Medical Institute (Dallas, U.S.A.)
- Austrian Chemical Society (Vienna, Austria)
- University of Vienna (Vienna, Austria)
- Biostructure (Strasbourg, France)
- Second Naples Workshop on Bioactive Peptides (Anacapri, Italy)
- DSM (Vaals, The Netherlands)
- C4 Symposium (Zuerich, Switzerland)
- University of Michigan (Ann Arbor, U.S.A.)
- Eli Lilly (Indianapolis, U.S.A.)
- 10th Int. Biophysics Congress (Vancouver, Canada)
- UCSF (San Francisco, U.S.A.)

- 4th Symposium Protein Society (San Diego, U.S.A.)
- IBM Workshop on Polymer Science (Oberlech, Austria)
- European Physical Society (Amsterdam, The Netherlands)
- Czechoslovakian Academy of Sciences (Podebrady, Czechoslovakia)
- Molecular Graphics Society (York, United Kingdom)
- IBM, Intl. Business Machines Corp. (Rüschlikon, Switzerland)
- Eidg. Technische Hochschule (ETH) (Zurich, Switzerland)
- Max-Planck Institut für Biochemie (Martinsried, Germany)
- University of Zurich (Zurich, Switzerland)
- Hoffmann-La Roche (Basel, Switzerland)

1991

- Sandoz (Basel, Switzerland)
- Ciba-Geigy (Basel, Switzerland)
- Ciba Foundation Symposium (London, U.K.)
- Biozentrum University Basel (Basel, Switzerland)
- Dept. Informatik, ETH Zurich (Zurich, Switzerland)
- French Chemical Society (Obernai, France)
- Gesellschaft Deutscher Chemiker (Frankfurt, Germany)
- Swiss Computational Chemists (Bern, Switzerland)
- Dept. Organic Chemistry, University Basel (Basel, Switzerland)
- AKZO (Arnhem, The Netherlands)
- NATO Workshop on Computation in Biotechnology (Sant Feliu, Spain)
- Workshop on Structure and Function of Mutated Proteins (Florence, Italy)
- EMBO Workshop on NMR Structures of Proteins (Kandersteg, Switzerland)
- Workshop on Molecular Simulation (Ovronnaz, Switzerland)
- Gesellschaft für Biologische Chemie (Bayreuth, Germany)
- Ecole Polytechnique (Palaiseau, France)
- CNRS School of Protein Modelling (Toulouse, France)
- Congresso Nazionale die NMR (Milano, Italy)
- 14iemes Journées Scientifiques Rhône-Poulenc (Lyon, France)
- Johannes Gutenberg-Universität Mainz (Mainz, Germany)
- Utrecht Center for Computational Science (Utrecht, The Netherlands)

1992

- Unilever (Vlaardingen, The Netherlands)
- Société Royale de Chimie (Namur, Belgium)
- Rhône-Poulenc Rorer Recherche-Développement (Vitry, France)
- Universität Ulm (Ulm, Germany)
- Workshop on parallel computers (Ascona, Switzerland)
- Cray symposium (Bern, Switzerland)
- Joint Nordic Spring Meeting Physical Societies (Nyborg, Denmark)
- Novo-Nordisk (Bagsvaerd, Denmark)
- Bayer-Pharma (Wuppertal, Germany)
- Dept. Pharmacy ETH Zurich (Zurich, Switzerland)
- Workshop on supercomputing in science and industry (Ascona, Switzerland)
- Gesellschaft Österreichischer Chemiker (Graz, Austria)
- Siemens Nixdorf (München, Germany)
- Colorado State University (Fort Collins, USA)
- 3rd Keck Symposium (Houston, USA)
- Indian Institute of Science (Bangalore, India)
- Dept. Physics, University of Lausanne (Lausanne, Switzerland)
- Unilever (Vlaardingen, The Netherlands)
- Schering (Berlin, Germany)
- Technische Universität (Berlin, Germany)

1993

- Dept. Biochemistry, University of Zurich (Zurich, Switzerland)
- Keystone Symposium 1993 (Taos, USA)
- Workshop on Protein Dynamics & Thermodynamics (Jerusalem, Israel)
- CECAM Workshop on Starting Structures for Polymer Simulation (Paris, France)
- Max-Planck-Institut für Biochemie (Martinsried, Germany)
- Schwerpunktprogramm Informatik Workshop (Bern, Switzerland)
- Agouron Institute (San Diego, USA)
- Nalbandov-Beckman Institute Symposium (Urbana-Champaign, USA)
- Parallel Computational Biology Workshop (Urbana-Champaign, USA)
- Symposium on Macromolecular Structure & Function (Toronto, Canada)
- 12th Annual Conference of the Molecular Graphics Society (Interlaken, Switzerland)
- Société Vaudoise des Sciences Naturelles (Lausanne, Switzerland)
- Zeneca Pharmaceuticals (Macclesfield, United Kingdom)
- 22nd FEBS Meeting (Stockholm, Sweden)
- 7th Rhine-Knee Crystallographers Meeting (Délémont, Switzerland)
- Universitat Polytechnica de Catalunya (Barcelona, Spain)
- Leiden University (Leiden, The Netherlands)

1994

- Unilever Ltd (Vlaardingen, The Netherlands)
- EMBL (Heidelberg, Germany)
- Karolinska Institutet (Stockholm, Sweden)
- Int. Young Scientist meeting on Biotechnology (Ascona, Switzerland)
- Asean Molecular Biology Organisation (Osaka, Japan)
- Protein Engineering Research Institute (Osaka, Japan)
- Chemistry, Biology, Informatics Forum (Tokyo, Japan)
- Protein Engineering and Molecular Design Forum (Tokyo, Japan)
- University of Groningen (Groningen, The Netherlands)
- European Workshop COST-Chemistry (Como, Italy)
- Rhone-Poulenc (Vitry, France)
- 1st Eur. Conf. Comput. Chem. (Nancy, France)
- Ciba-Geigy (Basel, Switzerland)
- Thomae (Biberach, Germany)
- Center for Adv. Res. in Biotechnology (Rockville, USA)
- NIH (Bethesda, USA)
- Univ. of North Carolina (Chapel Hill, USA)
- Rhône-Poulenc/Rorer (Collegeville, USA)
- Bristol-Myers-Squibb (Princeton, USA)
- DuPont-Merck (Wilmington, USA)
- Unilever Ltd. (Vlaardingen, The Netherlands)
- XVI-th Int. Conf. Magn. Res. in Biol. Syst. (Eindhoven, The Netherlands)
- NOVUM Conf. Protein Motion (Stockholm, Sweden)
- Groningen Biomolecular Sciences Institute (Groningen, The Netherlands)
- Royal Society Meeting on Protein Folding (London, U.K.)
- Zeneca Pharmaceuticals (Macclesfield, U.K.)
- Conference at the Institute Juan March (Madrid, Spain)
- Conference at Unilever Ltd. (Vlaardingen, The Netherlands)
- University of Amsterdam (Amsterdam, The Netherlands)

1995

- WISOR IV Winterschool (Bressanone, Italy)
- Chemische Gesellschaft (Fribourg, Switzerland)
- VW-Stiftung Symposium (Hünfeld, Germany)
- University of Florence (Florence, Italy)

- Workshop on Protein Structure (Ripa d'Orcia, Italy)
- 1st Eur. Symp. Protein Society (Davos, Switzerland)
- Eur. Research Conf. NMR in Molecular Biology (Wildbad-Kreuth, Germany)
- University of Heidelberg (Heidelberg, Germany)
- Summerschool on MC and MD simulation (Como, Italy)
- University of Science and Technology of China (Hefei, China)
- National Supercomputing Research Centre of Singapore (Singapore)
- Centre for Math. Modelling and Computer Simulation (Bangalore, India)
- Indian Institute of Science (Bangalore, India)
- C4 Workshop on computational chemistry (Zurich, Switzerland)

1996

- Rhône-Poulenc Rorer (Vitry, France)
- Gesellschaft Deutscher Chemiker (Konstanz, Germany)
- University of Georgia (Athens, USA)
- Genentech, Inc. (South San Francisco, USA)
- 37th ENC Conference (Pacific Grove, USA)
- University of California (San Francisco, USA)
- Agouron Pharmaceuticals (San Diego, USA)
- University of California (San Diego, USA)
- Amgen Inc. (Thousand Oaks, USA)
- University of Zurich (Zurich, Switzerland)
- Gesellschaft österreichischer Chemiker (GÖCH) (Vienna, Austria)
- University of Vienna (Vienna, Austria)
- NATO workshop on biomolecular structure and dynamics (Loutraki, Greece)
- Gordon Research Conference on computational chemistry (New Hampton, USA)
- WATOC '96: 4th World Congress (Jerusalem, Israel)
- IUPAB: 12th Int. Biophys. Congress (Amsterdam, The Netherlands)
- Amer. Chem. Society: 212th National Meeting (Orlando, USA)
- Firmenich S.A. (Geneva, Switzerland)

1997

- Rhône-Poulenc Rorer (Vitry, France)
- Universität Tübingen (Tübingen, Germany)
- Oxford Centre Molecular Sciences (Oxford, U.K.)
- Workshop on computation of protein structure (Oxford, U.K.)
- Dept. Physical Chemistry, University of Oxford (Oxford, U.K.)
- Humboldt Universität (Berlin, Germany)
- 2nd Int. Symp. Algorithms for Macrom. Modelling (Berlin, Germany)
- Givaudan-Roure S.A. (Dübendorf, Switzerland)
- Zeneca Pharmaceuticals (Macclesfield, U.K.)
- IUPAC: 36th Int. Congress (Geneva, Switzerland)
- 3rd Eur. Research Conf. NMR in Molecular Biology (Oxford, U.K.)
- MGS and WATOC Conference: Modelling '97 (Erlangen, Germany)
- 2nd Int. Conf. on Molecular Structural Biology (Vienna, Austria)
- Int. Workshop on Polyelectrolytes, MPI Pol. Forschung (Mainz, Germany)
- 12. CIC Workshop der GDCh (Männedorf, Switzerland)
- Workshop on MC approach to Biopolymers and Folding, KFA (Jülich, Germany)
- Rheinisch-Westphälische Technische Hochschule (Aachen, Germany)
- Int. Workshop on Bioinformatics, Biozentrum, Univ. Basel (Basel, Switzerland)

1998

- Technische Universität München (München, Germany)
- IRRMA simulation course, EPFL (Lausanne, Switzerland)
- Bristol-Myers-Squibb (Princeton, USA)
- Merck-DuPont (Wilmington, USA)

- National Institutes of Health (NIH) (Washington D.C., USA)
- 3rd Johns Hopkins Protein Folding Meeting (Berkeley Springs, USA)
- Eur. Conf. on Comput. Chem. (Chambery, France)
- Biomedical Centre, Uppsala University (Uppsala, Sweden)
- Rhône-Poulenc Rorer (Lyon, France)
- Cours 3ème Cycle en Physique, EPFL (Lausanne, Switzerland)
- CECAM Workshop on implicit solvent models (Lyon, France)
- Symp. on large scale computing, Lund University (Lund, Sweden)
- Cours 3ème Cycle en Physique, EPFL (Lausanne, Switzerland)
- CECAM Workshop on hybrid methods (Lyon, France)
- Gordon Research Conference (Kingston, USA)
- University of Florence (Florence, Italy)
- 6th Naples Workshop on Bioactive Peptides (Capri, Italy)
- EMBO Workshop on Proteins (EMBL, Heidelberg, Germany)
- 34th Symposium for Theoretical Chemistry (Gwatt, Switzerland)
- University of Tübingen (Tübingen, Germany)
- Workshop on protein folding (Madrid, Spain)

1999

- IMS Int. Workshop on Protein Stability and Folding (Okazaki, Japan)
- Oxford Centre Molecular Sciences (Oxford, U.K.)
- Int. School of Struct. Biology and Magn. Resonance (Erice, Italy)
- Gordon Conf. on Comput. Aspects of NMR (Il Ciocco, Italy)
- Kansas State University (Manhattan, USA)
- Workshop on Treatment of Electrostatic Interactions (Santa Fe, USA)
- COST Workshop (Geneva, Switzerland)
- Course Advanced Computing in NMR Spectr. (Florence, Italy)
- Conf. on Understanding Biomol. Struct., Funct., Dyn. (Groningen, The Netherlands)
- Penn State University (State College, USA)
- Univ. of the Sciences in Philadelphia (Philadelphia, USA)
- Univ. of Science and Technology of China (Hefei, China)
- Sino-Swiss Workshop on Bioinformatics (Beijing, China)
- University of Utrecht (Utrecht, The Netherlands)

2000

- National Institute for Medical Research (London, U.K.)
- University of Florence (Florence, Italy)
- 18-th Molecular Graphics Society Meeting (York, U.K.)
- IBM Research Laboratory (Rüschlikon, Switzerland)
- Uppsala University (Uppsala, Sweden)
- VW Symposium on Conformational Control (Kloster Banz, Germany)
- Conference Computational Biophysics 2000 (Nice, France)
- Gordon Research Conference on Biopolymers (Newport, USA)
- IBM Tomas Watson Research Laboratory (Yorktown Heights, USA)
- Gordon Research Conference on Computational Chemistry (Oxford, U.K.)
- University of Barcelona (Barcelona, Spain)
- XIX-th Int. Conf. Magn. Res. in Biol. Sci. (Florence, Italy)
- 7-th Biophysics Summerschool (Rovinj, Croatia)

2001

- University of Massachusetts Medical School (Worcester, USA)
- Wesleyan University (Middletown, USA)
- Bristol-Myers-Squibb (Princeton, USA)
- National Institutes of Health (Bethesda, USA)
- University of California (San Francisco, USA)
- IBM Workshop on Protein Folding (San Diego, USA)

- 221-th ACS meeting (San Diego, USA)
- Annual Meeting Swiss Physical Society (Dübendorf, Switzerland)
- Gesellschaft Deutscher Chemiker (Mülheim, Germany)
- Leiden University (Leiden, The Netherlands)
- Gesellschaft Deutscher Chemiker (Göttingen, Germany)
- Boehringer Ingelheim (Biberach, Germany)
- SIMU conference (Konstanz, Germany)
- University of Queensland (Brisbane, Australia)
- ComBio2001 (Canberra, Australia)
- 7-th Australian Molecular Modelling Workshop (Canberra, Australia)
- Sydney Protein Meeting (Sydney, Australia)
- Ludwig Institute for Cancer Research (Melbourne, Australia)
- NWO/Huygens-lezing (Den Haag, The Netherlands)

2002

- University of Konstanz (Konstanz, Germany)
- Wacker GmbH (München, Germany)
- IBM and NeSC Workshop on Protein Science (Edinburgh, Scotland)
- Lund Life Sciences Symposium (Lund, Sweden)
- Symposium New Chemistry ETH Zurich (Zurich, Switzerland)
- University of Pernambuco (Recife, Brazil)
- Workshop on Modeling in Biophysics (Rio de Janeiro, Brazil)
- University of Sao Paulo (Sao Paulo, Brazil)
- University of Sao Paulo (Ribeirao Preto, Brazil)
- University of Leiden (Leiden, The Netherlands)
- COST-D9 Workshop (Smolenice, Slovakia)
- University of Groningen (Groningen, The Netherlands)
- Gordon Research Conf. on Comput. Chemistry (New London, USA)
- SFC Eurochem Conference (Toulouse, France)
- Exploring Modern Comput. Chemistry (Nottingham, UK)
- WATOC'02 (Lugano, Switzerland)
- Bijvoet Seminar, University of Utrecht (Utrecht, The Netherlands)
- Ehrenfest Colloquium, University of Leiden (Leiden, The Netherlands)
- 44th Symp. of Soc. for Histochemistry (Vlissingen, The Netherlands)
- NCCR Symposium Uni Zurich (Zurich, Switzerland)

2003

- Sharif University of Technology (Tehran, Iran)
- University of Tehran (Tehran, Iran)
- Tarbiat Modarres University (Tehran, Iran)
- University of Leiden (Leiden, The Netherlands)
- University of Bordeaux (Bordeaux, France)
- 7th Annual Meeting Swedish Structural Biology (Tallberg, Sweden)
- Summerschool Biomolecular Structure and Dynamics (Otočec, Slovenia)
- Astra Zeneca (Macclesfield, U.K.)
- Oxford University (Oxford, U.K.)
- 11th Intl. Congress of Quantum Chemistry (Bonn, Germany)
- Technical University Delft (Delft, The Netherlands)
- 8th Biophysics Summerschool (Rovinj, Croatia)
- National Institutes of Health (Bethesda, USA)

2004

- Conf. on Theory and Applic. of Comput. Chemistry (Gyeongju, S.Korea)
- ETH-Kolloquium Naturwiss. und Unterricht (Zurich, Switzerland)
- Free University (Amsterdam, The Netherlands)
- Workshop Intrinsic Reactivity of New Molec. Materials (Nice, France)

- Intl. Meeting Molec. Graphics and Modelling Society (Manchester, U.K.)
- EMBO Course Methods for Protein Simulation and Drug Design (Shanghai, China)
- University of Science and Technology of China (Hefei, China)
- University of Beijing (Beijing, China)
- 2nd Eur. Conf. on Chemistry towards Biology (Seggau/Graz, Austria)
- Pantok Dialogos (Zurich, Switzerland)

2005

- WATOC Congress (Capetown, South Africa)
- Kolloquium Naturwiss. at University Basel (Basel, Switzerland)
- Glaxo-Smith-Kline (Stevenage, UK)
- Pfizer (Sandwich, UK)
- Royal Dutch Acad. Sciences (Amsterdam, The Netherlands)
- Symposium Frontiers in Comput. Biology, NIH (Washington, USA)
- Kolloquium Phys. Chemie ETH (Zurich, Switzerland)
- Dutch Polymer Institute, Tech. Univ. Eindhoven (Eindhoven, The Netherlands)
- Sika Technologies AG, (Zurich, Switzerland)
- Boehringer (Wien, Austria)
- Symposium Theoretical Chemistry (Innsbruck, Austria)
- Parrinello Symposium (Monte Verita, Ascona, Switzerland)
- FEBS Course Theo. Mod. of ligand binding and enzymatic catalysis (Tromsø, Norwegen)
- Intl. Conf. on Diff. Eq. from Theory to Comput. Sci. and Eng. (Zurich, Switzerland)
- Rotary Club (Zug, Switzerland)
- Conf. Biol. Dynamics: from molecules to cells (Amsterdam, The Netherlands)

2006

- Chemische Gesellschaft Darmstadt (Darmstadt, Germany)
- Univ. Heidelberg (Heidelberg, Germany)
- Organon N.V. (Oss, The Netherlands)
- University of Vienna (Vienna, Austria)
- Technical University of Munich (Munich, Germany)
- Kolloquium Rechnergestützte Wissenschaften, ETH Zurich (Zurich, Switzerland)
- University of Basel (Basel, Switzerland)
- Max Gruber Lecture, University of Groningen (Groningen, The Netherlands)
- University of Ljubljana (Ljubljana, Slovenia)
- Summer school Varenna (Varenna, Italy)
- 1st European Chemistry Congress (Budapest, Hungary)
- IFPSC Workshop, 3M Headquarters (St Paul, USA)

2007

- J. W. Goethe University (Frankfurt, Germany)
- University of Leiden (Leiden, The Netherlands)
- University of Heidelberg (Heidelberg, Germany)
- Ecole Normale Supérieure (Paris, France)
- Institut de Biologie Physico-Chimique (Paris, France)
- Darmstädter Molecular Modelling Workshop (Erlangen, Germany)
- BIG seminar series, University Lausanne (Lausanne, Switzerland)
- Bioinformatics Institute, Biomed. Res. Council (Singapore)
- Nanyang Technical University (Singapore)
- National Institute of Chemistry (Ljubljana, Slovenia)
- Rudjer Boskovic Institute (Zagreb, Slovenia)
- Course on free energy calculation (Zurich, Switzerland)
- 12th European Conf. on the spectroscopy of biological molecules (Bobigny, France)
- Conference on biomolecular simulation and experiment (Manchester, UK)
- University of Leeds (Leeds, UK)
- University of Oxford (Oxford, UK)

- Birkbeck College, University of London (London, UK)
- Symposium on light-induced dynamics of biopolymers (Munich, Germany)

2008

- 6th NCCR course on biomolecular modelling (Kandersteg, Switzerland)
- Zing conference on computational biophysics (Antigua and Barbuda)
- Kolloquium Rechnergestützte Wissenschaften, ETH (Zurich, Switzerland)
- CASP 7.5 conference (Madrid, Spain)
- Ludwig-Maximilians University (Munich, Germany)
- Theoretical Biochemistry Conference (Stockholm, Sweden)
- Workshop Computational Biology and System Biology (Jülich, Germany)
- Pfizer Ltd. (Sandwich, UK)
- NCCR structural biology seminar (Zurich, Switzerland)
- National Yang-Ming University (Taipei, Taiwan)
- Academia Sinica (Taipei, Taiwan)
- Biomolecular Modelling Retreat (Stradbroke Island, Australia)
- WATOC conference (Sydney, Australia)
- TACC conference (Shanghai, China)
- University of Science and Technology of China (Hefei, China)
- CAS-SSSTC workshop (Zurich, Switzerland)

2009

- Deutsche Chemische Gesellschaft (Berlin, Germany)
- University of Chicago (Chicago, USA)
- Cornell Medical College (New York, USA)
- University of Pittsburgh (Pittsburgh, USA)
- Department of Chemistry, University of Vienna (Vienna, Austria)
- Academy of Science (Linz, Austria)
- Department of Physics, University of Vienna (Vienna, Austria)
- Boehringer GmbH (Vienna, Austria)
- Theoretical and Computational chemistry, University of Vienna (Vienna, Austria)
- Department of Physics, University of Rome La Sapienza (Rome, Italy)
- Biomolecular Simulation Workshop (Stockholm, Sweden)
- 23rd Symposium of the Protein Society (Boston, USA)
- Mediterranean Institute for Life Sciences (Split, Croatia)
- 3rd Adriatic Meeting on Computational Solutions in the Life Sciences (Primosten, Croatia)
- Symp. Frontiers in Macromol. Simulation (Atlanta, USA)

2010

- 8th NCCR course on biomolecular modelling (Kandersteg, Switzerland)
- King's College, University London (London, UK)
- Int. Symp. Theoretical and Comput. Chemistry (Muelheim, Germany)
- Workshop Frontiers in the Life Sciences (Strasbourg, France)
- University of Calgary (Calgary, Canada)
- University of Alberta (Edmonton, Canada)
- ACS - meeting (San Francisco, USA)
- Sino Swiss courses on biomolecular modelling (Hefei, China)
- Chinese Academy of Sciences (Beijing, China)
- Tsinghua University (Beijing, China)
- Int. Soc. Quant. Biology & Pharmacy (Cetraro, Italy)
- Gordon Conf. Comput. Chemistry (Les Diablerets, Switzerland)
- 8-th NCCR Symposium on Structural Biology (Zurich, Switzerland)
- Inst. St. Raffaele (Milano, Italy)
- CECAM workshop on Protein Folding (Lausanne, Switzerland)
- Symp. Frontiers in Simulation (Los Angeles, USA)

2011

- University Göttingen (Göttingen, Germany)
- MPI for Biophysical Chemistry (Goettingen, Germany)
- Univ. Nat. Sci. Vienna (Vienna, Austria)
- Uppsala University (Uppsala, Sweden)
- PSI (Villigen, Switzerland)
- IIQB (Oeiras, Portugal)
- CECAM workshop on thermodynamics (Palaiseau, France)
- LPC colloquium ETH (Zurich, Switzerland)
- GDCh colloquium (Karlsruhe, Germany)
- Biochemical Summerschool (Spetses, Greece)
- University of Cape Town (Cape Town, South Africa)
- WATOC 2011 (Santiago de Compostela, Spain)
- 47-th Symp. Theor. Chemistry (Sursee, Switzerland)
- 2nd Workshop on Molecular Kinetics (Berlin, Germany)

2012

- 10th NCCR course on biomolecular modelling (Kandersteg, Switzerland)
- Karolinska Institut (Stockholm, Sweden)
- Biotop seminar, Universität für Bodenkultur (Vienna, Austria)
- 10th NCCR Symposium on Structural Biology (Zurich, Switzerland)
- Danube Center for Atomistic Modeling (Vienna, Austria)
- Promotionsfeier ETH Zürich (Zurich, Switzerland)

2013

- 57th General meeting Biophysical Society (Philadelphia, USA)
- DECHEMA workshop on modelling and simulation (Frankfurt, Germany)
- ACS meeting (New Orleans, USA)
- University of Salerno (Salerno, Italy)
- Farewell lecture ETH Zürich (Zurich, Switzerland)
- University of Leipzig (Leipzig, Germany)
- Symposium Computers in Chemistry (Amsterdam, The Netherlands)
- Workshop on free energy calculations (Snowmass, USA)
- Conference Particles 2013 (Stuttgart, Germany)
- Workshop on protein dynamics (Saig, Germany)
- University of Cape Town (Cape Town, South Africa)
- HITS Heidelberg (Heidelberg, Germany)
- Federal University of Pernambuco (Recife, Brazil)
- University of Sao Paulo (Sao Paulo, Brazil)
- 17th Braz. Symp. Theor. Chem. (Angra dos Reis, Brazil)
- Pontifical Catholic University (Rio de Janeiro, Brazil)

2014

- CECAM Workshop on Proteins (Stuttgart, Germany)
- CECAM Workshop on Entropy (Vienna, Austria)
- FEBS Course on Ligand-Protein Binding (Nové Hradky, Czechia)
- Gesellschaft Deutscher Chemiker, University of Konstanz (Konstanz, Germany)
- Bioinformatics Institute A-star (Singapore)
- Students and Early-Career Research Forum, Lamington Natl. Park (Queensland, Australia)
- Molecular Modelling Conf. AMMA2014, Lamington Natl. Park (Queensland, Australia)
- IUPAB Conference 2014 (Brisbane, Australia)
- University of Hong Kong (Hong Kong, China)
- Diskussions Forum Sternwarte ETH (Zurich, Switzerland)

2015

- ACS meeting (Denver, USA)
- Course on Molecular Modelling at the Bodenkulturuniversität Wien (Vienna, Austria)
- Advanced School Biomolecular Simulation (Recife, Brazil)

- Biophysical Society of Brazil (Natal, Brazil)
- Gordon Research Seminar (Il Ciocco, Italy)
- CANES Annual Retreat (Windsor, U.K.)
- Conference on Validation of Simulation (Hannover, Germany)
- Dept. Chemistry and Pharmacy, Free University (Amsterdam, The Netherlands)
- SMASH 2015 NMR conference (Baveno, Italy)
- Paul Scherrer Institute (Villigen, Switzerland)
- Workshop Proteins and Beyond, Leiden University (Leiden, The Netherlands)
- Amsterdam Institute for Molecules, Medicines and Systems (Amsterdam, The Netherlands)
- Practical Course in Biomolecular Modelling, AIMMS (Amsterdam, The Netherlands)
- Centro Interdisciplinario de Neurociencia de Valparaiso (Valparaiso, Chile)
- Int. Spring School Thermodynamics, Fundación Cienca & Vida (Santiago de Chile, Chile)

2016

- Workshop on Polarisation, University of British Columbia (Vancouver, Canada)
- University of Vienna (Vienna, Austria)
- Intl. Conf. on Molecular Simulation, ICMS2016 (Shanghai, China)
- ChemPartner CRO (Shanghai, China)

2017

- University of Alberta (Edmonton, Canada)
- CECAM Workshop on Comput. Challenges in Drug Discovery (Lausanne, Switzerland)
- MIM Workshop on Laboratory Management (Zürich, Switzerland)
- Rechtswissenschaftliches Institut Universität Zürich (Zürich, Switzerland)
- Int. Spring School Thermodynamics, Fundación Cienca & Vida (Santiago de Chile, Chile)

2018

- CECAM Workshop on Analysis and Design of Allostery (Lausanne, Switzerland)
-

Scientific publications, books

Edited:

- W.F. van Gunsteren, P.K. Weiner, eds.
Computer Simulation of Biomolecular Systems,
Theoretical and Experimental Applications,
Escom Science Publishers, Leiden, The Netherlands, 1989, 224 pages
ISBN 90-72199-03-0
- W.F. van Gunsteren, P.K. Weiner and A.J. Wilkinson, eds.
Computer Simulation of Biomolecular Systems,
Theoretical and Experimental Applications, Vol. 2,
Escom Science Publishers, Leiden, The Netherlands, 1993, 589 pages
ISBN 90-72199-15-4
- W.F. van Gunsteren, P.K. Weiner and A.J. Wilkinson, eds.
Computer Simulation of Biomolecular Systems,
Theoretical and Experimental Applications, Vol. 3,
Kluwer Academic Publishers, Dordrecht, The Netherlands, 1997, 618 pages
ISBN 90-72199-25-1

Authored:

- W.F. van Gunsteren, S.R. Billeter, A.A. Eising, P.H. Hünenberger, P. Krüger,
A.E. Mark, W.R.P. Scott, I.G. Tironi
Biomolecular Simulation: The GROMOS96 Manual and User Guide
Vdf Hochschulverlag AG an der ETH Zürich, Zürich, Switzerland, 1996, 1042 pages
ISBN 3 7281 2422 2

Scientific publications, articles

1. W.F. van Gunsteren, E. Boeker and K. Allaart
The FBCS model and the inverse gap equations applied to the tin isotopes
Z. Phys. **267** (1974) 87-96
2. K. Allaart and W.F. van Gunsteren
Projected quasiparticle calculations in large model spaces
Nucl. Phys. **A234** (1974) 53-60
3. W.F. van Gunsteren and K. Allaart
Can the o^+ states of even superfluid nuclei be described by anharmonic pairing vibrations ?
Nucl. Phys. **A236** (1974) 317-326
4. W.F. van Gunsteren and K. Allaart
Influence of an enlargement of the model space on number projected quasiparticle calculations
Z. Phys. **A276** (1976) 1-8
5. W.F. van Gunsteren, K. Allaart and E. Boeker
A particle-quasiparticle description of $^{112,114,116}\text{Sb}$
Nucl. Phys. **A266** (1976) 365-378
6. W.F. van Gunsteren
A hole-quasiparticle description of $^{114,116}\text{In}$
Nucl. Phys. **A265** (1976) 263-279
7. W.F. van Gunsteren, P. Hofstra and H. Muether
Influence of the effective interaction on spectra of superfluid nuclei
Z. Phys. **A278** (1976) 251-255
8. W.F. van Gunsteren
The nuclear quasiparticle model
Thesis, Vrije Universiteit Amsterdam, 1976, 253 pag.
9. W.F. van Gunsteren and D. Rabenstein
Properties of the low-lying levels of ^{122}Sb
Z. Phys. **A282** (1977) 55-64
10. W.F. van Gunsteren and H.J.C. Berendsen
Algorithms for macromolecular dynamics and constraint dynamics
Mol. Phys. 34 (1977) 1311-1327
11. W.F. van Gunsteren, K. Allaart and P. Hofstra
Number-projected three-quasiparticle description of the odd Sn isotopes
Z. Phys. **A288** (1978) 49-57
12. W.F. van Gunsteren, H.J.C. Berendsen and J.A.C. Rullmann
Inclusion of Reaction Fields in Molecular Dynamics: Application to Liquid Water
Faraday Disc. Chem. Soc. **66** (1978) 58-70
13. T. Lee, J. Bisschop, W. van der Lugt and W.F. van Gunsteren
Radial distribution functions of liquid Na and Cs
Physica **93B** (1978) 59-62
14. W.F. van Gunsteren
Constrained dynamics of flexible molecules
Mol. Phys. **40** (1980) 1015-1019
15. W.F. van Gunsteren and M. Karplus
A Method for Constrained Energy Minimization of Macromolecules
J. Comput. Chem. **1** (1980) 266-274

16. W.F. van Gunsteren, H.J.C. Berendsen and J.A.C. Rullmann
Stochastic dynamics for molecules with constraints Brownian dynamics of n-alkanes
Mol. Phys. **44** (1981) 69-95
17. W.F. van Gunsteren and M. Karplus
Effect of constraints, solvent and crystal environment on protein dynamics
Nature **293** (1981) 677-678
18. H.J.C. Berendsen, J.P.M. Postma, W.F. van Gunsteren and J. Hermans
Interaction models for water in relation to protein hydration, in: "Intermolecular Forces", B. Pullman ed., Reidel, Dordrecht, 1981, p. 331-342
19. W.F. van Gunsteren and M. Karplus
Effect of Constraints on the Dynamics of Macromolecules
Macromolecules **15** (1982) 1528-1544
20. W.F. van Gunsteren and M. Karplus
Protein Dynamics in Solution and in a Crystalline Environment: A Molecular Dynamics Study
Biochemistry **21** (1982) 2259-2274
21. W.F. van Gunsteren and H.J.C. Berendsen
Algorithms for brownian dynamics
Mol. Phys. **45** (1982) 637-647
22. W.F. van Gunsteren and H.J.C. Berendsen
On the fluctuation-dissipation theorem for interacting brownian particles
Mol. Phys. **47** (1982) 721-723
23. W.F. van Gunsteren and H.J.C. Berendsen
Molecular dynamics: perspective for complex systems
Biochem. Soc. Trans. **10** (1982) 301-305
24. S. Swaminathan, T. Ichiye, W.F. van Gunsteren and M. Karplus
Time Dependence of Atomic Fluctuations in Proteins: Analysis of Local and
and Collective Motions in Bovine Pancreatic Trypsin Inhibitor
Biochemistry **21** (1982) 5230-5241
25. W.F. van Gunsteren, H.J.C. Berendsen, J. Hermans, W.G.J. Hol and J.P.M. Postma
Computer simulation of the dynamics of hydrated protein crystals and its comparison with X-ray data
Proc. Natl. Acad. Sci USA **80** (1983) 4315-4319
26. M. Karplus, S. Swaminathan, T. Ichiye and W.F. van Gunsteren
Local and collective motions in protein dynamics, in: "Mobility and function
in proteins and nucleic acids",
Ciba Symp. **93**, Pitman, London, (1983), pp. 271-290
27. W.F. van Gunsteren and H.J.C. Berendsen
Stochastic dynamics of polymers, in: "The Physics of Superionic Conductors and Electrode Materials",
J.W. Perram, ed., NATO ASI Series **B92** (1983) 241-256 (Plenum Press)
28. H.J.C. Berendsen and W.F. van Gunsteren
Molecular dynamics with constraints, in: "The Physics of Superionic Conductors and Electrode Materials",
J.W. Perram, ed., NATO ASI Series **B92** (1983) 221-240 (Plenum Press)
29. J. Hermans, H.J.C. Berendsen, W.F. van Gunsteren and J.P.M. Postma
A Consistent Empirical Potential for Water-Protein Interactions
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30. H.J.C. Berendsen and W.F. van Gunsteren
Molecular Dynamics Simulations: Techniques and Approaches, in: "Molecular Liquids - Dynamics
and Interactions", A.J. Barnes et al. eds., NATO ASI Series **C135** (1984) 475-500 (Reidel, Dordrecht)

31. W.F. van Gunsteren and H.J.C. Berendsen
Computer Simulation as a Tool for Tracing the Conformational Differences between Proteins in Solution and in the Crystalline State
J. Mol. Biol. **176** (1984) 559-564
32. W.F. van Gunsteren, H.J.C. Berendsen, F. Colonna, D. Perahia, J.P. Hollenberg and D. Lellouch
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33. H.J.C. Berendsen, W.F. van Gunsteren and J.P.M. Postma
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34. H.J.C. Berendsen, J.P.M. Postma, W.F. van Gunsteren, A. DiNola and J.R. Haak
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35. W.F. van Gunsteren, R. Kaptein and E.R.P. Zuiderweg
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36. K. Remerie, W.F. van Gunsteren, J.P.M. Postma, H.J.C. Berendsen and J.B.F.N. Engberts
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Mol. Phys. **53** (1984) 1517-1526
37. R. Kaptein, E.R.P. Zuiderweg, R.M. Scheek, R. Boelens and W.F. van Gunsteren
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J. Mol. Biol. **182** (1985) 179-182
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J. Mol. Biol. **183** (1985) 461-477
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Biochimie **67** (1985) 707-715
41. B. Witholt, W.F. van Gunsteren and W.G.J. Hol
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Vol. IV, Verlag Chemie, Weinheim, FRG, 1985, pp. 497-517
42. W.F. van Gunsteren and H.J.C. Berendsen
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43. H.J.C. Berendsen, J.P.M. Postma and W.F. van Gunsteren
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44. W.F. van Gunsteren, R. Boelens, R. Kaptein, R.M. Scheek and E.R.P. Zuiderweg
An Improved Restrained Molecular Dynamics Technique to Obtain Protein Tertiary Structure from Nuclear Magnetic Resonance Data, in: "Molecular Dynamics and Protein Structure", J. Hermans ed., Polycrystal Book Service, P.O. Box 27, Western Springs, Ill. 60558, USA, (1985), pp. 92-99
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The Dynamics of Pancreatic Polypeptide: A Comparison of X-ray Anisotropic Refinement at 0.98 Å Resolution, Molecular Dynamics and Normal Mode Analysis, in: "Molecular Dynamics and Protein Structure", J. Hermans ed., Polycrystal Book Service, P.O. Box 27, Western Springs, Ill. 60558, USA, (1985), pp. 85-91
46. J. Åqvist, W.F. van Gunsteren, M. Leijonmarck and O. Tapia
A Molecular Dynamics Study of the C-terminal Fragment of the L7/L12 Ribosomal Protein, in: "Molecular Dynamics and Protein Structure", J. Hermans ed., Polycrystal Book Service, P.O. Box 27, Western Springs, Ill. 60558, USA, (1985), pp. 145-147
47. H. Kessler, B. Kutscher, R. Kerssebaum, A. Klein, J. Lautz, R. Obermeier, H. Muellner, W.F. van Gunsteren, R. Boelens, R. Kaptein
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48. W.F. van Gunsteren, H.J.C. Berendsen and J.P. Hollenberg
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dynamics simulations
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State
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Molecular Dynamics Simulation of Despentapeptide Insulin in a Crystalline Environment
J. Mol. Biol. **200** (1988) 571-577
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Conformational Dynamics Detected by Nuclear Magnetic Resonance NOE Values and J-Coupling Constants
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