

CV: English part

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*Updated: November 2015*

## I. Professional Activities

### I.1 Publications

*Cosmological black holes: the perfect fluid collapse with pressure in a FRW background,*

Class.Quant.Grav. 32 (2015) 21, 215001, DOI: [10.1088/0264-9381/32/21/215001](https://doi.org/10.1088/0264-9381/32/21/215001) (co-authors Rahim Moradi, Javad T. Firouzjaee)

*Relativistic rotation curve for cosmological structures,* 2014, *Int. J. Mod. Phys. D* (2014), DOI:

10.1142/S0218271814500746, [arXiv:1212.4796](https://arxiv.org/abs/1212.4796) (co-authors: [Mohammadhosein Razbin](#), [J. T. Firouzjaee](#));

*Gravitational Lensing by a structure in a cosmological background,* 2013, *Phys. Rev. D* **88** (2013) 083011

DOI: [10.1103/PhysRevD.88.083011](https://doi.org/10.1103/PhysRevD.88.083011)

[arXiv:1308.4510](https://arxiv.org/abs/1308.4510) (co-authors: [M. Parsi Mood](#), [Javad T. Firouzjaee](#));

*A concrete anti-de Sitter black hole with dynamical horizon having toroidal cross sections and its characteristics,*

2012, *EPL* **100** 39001, [arXiv:1207.3673](https://arxiv.org/abs/1207.3673) (co-authors: P. Dadras, and J.T. Firouzjaee);

*Radiation from a dust dynamical LTB black hole,* 2012, *EPL*, 97, 29002, [arXiv:1104.0530](https://arxiv.org/abs/1104.0530) (co-author: J.T.

Firouzjaee);

*Do we know the mass of a black hole? Mass of some cosmological black hole models,* March 2012, *GRG*, Volume 44,

[Issue 3](https://arxiv.org/abs/1010.3971), pp 639-656, [arXiv:1010.3971](https://arxiv.org/abs/1010.3971) (co-author: [J. T. Firouzjaee](#), [M. Parsi Mood](#));

*Asymptotically FRW black holes,* 2010, *GRG*, 42, 2431, [arXiv:0812.5108](https://arxiv.org/abs/0812.5108) (co-author: J.T. Firouzjaee);

*Lensing effects in inhomogeneous cosmological models,* 2009, *Phys. Rev. D* 79 (2009), 102002, [arXiv:0901.0340](https://arxiv.org/abs/0901.0340) (co-authors:

[Sima Ghassemi](#), [S. Khoini-Moghaddam](#));

*Modified averaging process in GR: Case study flat LTB,* 2009, *Int. Jour. Mod. Phys. D* 18(2009), 1177-1192, [arXiv:0709.2558](https://arxiv.org/abs/0709.2558)

(co-authors: [E. Kourkchi](#), [Sh Khosravi](#));

*Matching LTB and FRW spacetimes through a null hypersurface*, 2008, Grav. and Cosmol., 14: 295-300, gr-qc/0702132, [arXiv:gr-qc/0702130](https://arxiv.org/abs/gr-qc/0702130) (co-author, S. Khakshournia);

*An inhomogeneous model universe behaving homogeneously*, 2008, GRG, 40:1047-1069, [arXiv:astro-ph/0702282](https://arxiv.org/abs/astro-ph/0702282) (co-authors: E. Kourkchi, Sh.Khosravi, and Y. Akrami);

*Non-linear Structure Formation and “Apparent” Acceleration: an investigation*, 2007, JCAP 12:017, [arXiv:astro-ph/0606703](https://arxiv.org/abs/astro-ph/0606703) (co-author: Tirthbir Biswas and Alessio Notari);

*Thick planar domain walls: its thin wall limits and dynamics*, 2007, Int. Jour. Mod. Phys. D, 16, 629-640, (co-authors: S. Ghassemi and S. Khakshournia);

*Evolution of thick walls in curved space-times*, 2006, Class Quant Grav, 23, 5927-5939, astro-ph/0605094 (co-author: S.Khosravi and S.Khakshournia);

*Generalized Friedman equations for a finite thick brane*, 2006, JHEP 08, 019; astro-ph/0605094 (co-author: Sima Ghassemi and Samad Khakshournia);

*On synchronization of clocks in general space-times*, 2005, Iran. Jour. Phys. Res., 5, 63 (co-author: M. R. Khajehpour);

*Spherical null shells within the distributional formalism*, 2005, Iran. Jour. Phys. Res., 5, 59 (co-author: Samad Khakshournia);

*Spherically symmetric thick branes in vacuum*, 2004, IJMP A, **19**, 4687, (co-authors: M. Borhani, S. Khakshournia);

*Dynamics of general relativistic spherical symmetric dust thick shell*, 2002, GRG **34**, 1847 (co-author: S. Khakshournia);

*Formation of cosmological mass condensation within a FRW universe*, 2002, Phys. Rev. D **65**, 027302 (co-author: S. Khakshournia).

*General relativistic relation between density contrast and peculiar velocity*, 2002, Int. J. Mod. Phys. D. **11**, 321-33 (co-author: S. Rahvar);

*Methods of gluing manifolds in general relativity*, 2002, Journ.Math Phys. **43**, 1519-1535 (co-author: K.Nozari);

*Dynamics of null hyper- surfaces in general relativity*, 2002, GRG **34**, 243, (Co-author: K. Nozari);

*Sign Function and Gluing of Space–Time Manifolds within Distributional Method*, 2001, Gravitation & Cosmology **7**, 261, (co-author: S. Khakshournia);

*Casimir Stress on Parallel Plates in a de Sitter Space-Time*, 2001, Class & Quant. Grav., 18, 2659 (co-author: M.R. Setare);

- Casimir Effect for Spherical Shell in de Sitter Space*, 2001, *Class. & Quant. Grav.*, **18**, 2331 (co-author: M. R. Setareh);
- A New Distributional Approach to Signature Change*, 2000, *Gen. Rel. Grav.* **32**, 253-269 (co-author: K. Nozari);
- A Model Universe with Variable Space Dimension: Its Dynamics and Wave-Function*, 1999, *Phys. Rev. D* **60**, 1035XX-1-22 (co-author: F. Nasser);
- Effective Time Variation of G in a Model Universe with Variable Space Dimension*, 1999, *Phys. Lett. A* **259**, 194-200 (co-authors: F. Nasser, M. Khorrami);
- Gravitational Coupling Constant in Arbitrary Dimension*, 1998, *Gravitation & Cosmology*, **4**, 1 (co-author: A. Nayeri);
- A Cosmological Model with Variable Dimension: Expansion as Decrumpling*, 1997, *I.J.M.P.D.*, to be published (co-authors: M. Khorrami, M. Mohazzab. And M. R. Ejtehad);
- Equivalence of Darms-Israel and Distributional Method for Thin-Shells in General Relativity*, 1996, *J. Math. Phys.* **37**,5627 (co-author: M. Khorrami);
- A Decrumpling Model of the Universe*, 1996, *Helvetica Physica Acta*, **69**, 237 (co-authors: M. Khorrami, M. Mohazzab);
- A Test Theory of the Local Structure of Space-Time: A Finslerian Approach*, 1994, *Class. & Quant. Grav.* **11**, 1 (co-authors: R. Golestanian, H.R.H Khajehpour)
- Tunnelling in Anisotropic Cosmological Models*, 1993, *Class & Quant. Grav.* **10**, 1353 (co-author: M. Mohazzab);
- Cylindrically Symmetric Thin Walls in General Relativity*, 1993, *J. Math. Phys.* **35** (2), 951 (co-author: M. Khorrami);
- Spherically Symmetric Thin Walls*, 1991, *Phys. Rev. D*, **44**, 557 (co-author: M. Khorrami);
- Test t-Theory of Special Relativity on the Rotating Disk*, 1989, *Journ. Physics AA*, **22**, 1589 (co-authors: G. Abolghasem and H.R.H. Khajehpour);
- How to Test the Special Theory of Relativity on the Rotating Earth*, 1988, *Phys. Lett. A*, **132**, 310 (co-authors: G. Abolghasem and M.R.H. Khajehpour);
- Distribution Function of an Ideal Gas in the de Sitter Space-Time*, 1988, *Class. & Quant. Gravity*, **5**, 321 (co-author: A. Rakei);
- An Alternative Relativistic-Law Equation of State*, 1982, *Acta Physica Polonica*, **B13**, 201;
- There is no Slow Uniform Contraction of a Fluid Sphere Obeying an Equation of State*, 1980, *Acta Physica Polonica*, **B11**, 193;
- Some Dynamical Aspects of a Test Theory of Special Relativity*, 1979, *Z. Naturforschung*, **34a**, 9233;

*Broken Lorentz Invariance and Conventionality of Clock Synchronization*, 1979, Phys. Lett. **71A**, 177;

*On The Non-Existence of Time-Dependent Fluid Spheres in General Relativity Obeying an Equation of State*, 1977, Ann. Inst. Henri Poincare, XXVII, 175;

*A Test Theory of Special Relativity I. Simultaneity and Clock Synchronization*, 1977, GRG, **8**, 497 (co-author: R. Sexl);

*A Test Theory of Special Relativity II. First Order Tests*, 1977, GRG, **8**, 515 (co-author: R. Sexl);

*A Test Theory of Special Relativity III. Second Order Tests*, 1977, GRG, **8**, 809 (co-author: R. Sexl);

*An Exact Solution to Salam's f-g Theory of Gravity*, 1973, Acta Phys. Austr, **36**,86;

*Allgemein-Kovariante Zwei-Tensor Theorie der Gravitation*, 1972, Acta Physica Austriaca, **37**, 152;

*On Exact Kerr-Schild Type Vacuum Solutions to Salam's Two-Tensor Theory of Gravity*, 1972, Comm. Math. Phys. 26, 301;

*Generally Covariant Massiv Gravitation*, 1972, Nuovo Comento **10B**, 483 (co-author: P.C. Aichelburg);

*Exact Wave-Type Solution to f-g Theory of Gravity*, 1971, Phys. Rev. Lett. **27**, 1533 (co-author: P.C. Aichelburg, H.K. Urbantke);

## **I. 2 Citations / Famous Papers (i.e. more than 700 citations)**

The three papers *Test Theory of Special Relativity* I, II, III have been cited more than 700 times;

C. Laemmerzahl elaborate extensively on the Mansouri-Sexl test theory in *Special Relativity: will it survive the next 101 years*, J. Ehlers and C. Laemmezahel (editors), Springer, Breerlin, 2006;

One chapter of Cl. Will's book (Theory and Experiment in Gravitational Physics, Revised Edition, Cambridge University Press, 1992) is devoted to the Mansouri-Sexl Test Theory of Relativity;

The review article "Phys. Report, 298 (3 & 4) 93-180, 1998" describes extensively the "Mansouri-Sexl Test Theory";

Nature's editorial, *How Special is Special Relativity*, J. Maddox, (Nature, 7 Feb. 1985, 313, p. 429) is devoted to this test theory; See also Test Theories of Special Relativity in Wikipedia (German and English).

### I. 3 Books / Book Chapters

*International Cooperation for Enhancing Nuclear Safety, Security, Safeguards and Non-proliferation*, Proceeding of the XIX Eduardo Amaldi Conference, Academia Nazionale dei Lincei, Rome, Italy, March 30-31, 2015, Luciano Maiani, Said Abousahl, and Wolfgang Plastino (editors). Springer 2015, Session chairman, p. 77.

"Special relativity" (in Persian), R. Mansouri, Sh. Khosravi, Sharif University Publishing, Tehran, 2010/1389;

"Workshop on The Future of Physical Sciences in Iran and the Region", F. Ardalan, G. Violini, R. Mansouri (Eds.), ISMO-UNESCO-IPM, Tehran, 2000;

"Large Scale Structure of the Universe", R. Brandenberger, R. Mansouri (Eds.), Kluwer Academic Publishers, 2000;

"Michelson, Lorentz, Poincare', Einstein", in *Relativitaet, Gruppen, Teilchen*, "by H. Urbantke and R.U. Sexl, Springer Verlag, 1975;

"Die Synchronization von Uhren," in the same reference as above;

"Relativistische Hydrodynamic", in the same reference as above.

"Schroedinger's Contribution to Relativity", in the *Schroedinger Equation*, Eds W. Thirring, P. Urban, Springer Verlag, 1977.

### I. 4 Invited Presentation

ICTP-Colloquium, *Test Theory of Special Relativity: What it is and Why We Need it*, 1988, ICTP, Trieste.

### I. 5 Book Review

Force and Geometry in Newton's Principia, by Francois De Gandt, 1996. *Gen. Rel. Grav.* **28**, 1029.

### I. 6 Contributed Presentations / Published Proceedings / Technical Reports

[arXiv:1304.5062](https://arxiv.org/abs/1304.5062) [[pdf](#), [other](#)]

Title: Exact general relativistic lensing versus thin lens approximation: the crucial role of the void  
Authors: [M. Parsi Mood](#), [Javad T. Firouzjaee](#), [Reza Mansouri](#)

[arXiv:1301.1480](https://arxiv.org/abs/1301.1480) [[pdf](#), [ps](#), [other](#)]

Title: The spherical perfect fluid collapse with pressure in the cosmological background  
Authors: [Rahim Moradi](#), [Javad T. Firouzjaee](#), [Reza Mansouri](#)  
Subjects: General Relativity and Quantum Cosmology (gr-qc); Galaxy Astrophysics (astro-ph.GA)

*Structured FRW universe leads to acceleration: a non-perturbative approach*, astro-ph/0512605;

*"On the Thin Wall Limit of Thick Planer Domain Walls"*, 2005, Submitted to Gravitation and General relativity, gr- qc/0505073 (Co- author: Sima Ghassemi, Samand Khakshournia);

*Casimir Energy for Self-interacting Scalar Field in a Spherical Shell*, 2002, hep-th/0201213 (Co-author: M. Setare);

*Casimir Action for Self-Interacting Scalar Field in 3-Spherical Shell*, 2002, hep-th/0201213 (Co-author: M. Setare);

*Junction Equations for Two General Spherically Symmetric Spacetimes and the Distributional Method*, 1999, hep-th/ 9911076 (Coauthor: S. Khakshournia);

*Application of Colombeau's Generalized Functions to Cosmological Models with Signature Change* (Co-author: K. Nozari). Proceeding of ISMC, Potsdam, March 30-April 4, 1998, M. Rainer and H.-J. Schmidt (Eds), World Scientific PC, Singapore;

*Rotation of Plane of Polarization of an Electromagnetic Wave Propagating over Cosmological Distances in "Finite Rotating Universe" Scenario*, gr-qc/9710028. (Coauthor: K. Nozari). Paper presented at the seminar "Kosmische Rotation". Berlin 1998;

*Rotation of Plane of Polarization of an Electromagnetic wave Propagating over Cosmological Distances in "Finite Rotating Universe" Scenario*, Abstracts of Contributed Papers, 1997, Pune, India;

*Distributional Approach to Signature Change*, Abstracts of Contributed Papers, GRI5, Pune, India;

*Wave Function of a Decoupling Model of the Universe*, Abstracts of Contributed Papers, GRI5, 1997, Pune, India;

*A new Class of Inhomogeneous Cosmological Solutions of Einsteins Equations*, Preprint, Potsdam University, Math. Inst., 1996;

*Equivalent Lagrangians and Quantization*, Preprint, Potsdam University preprint 96/4, Math Inst., May 1996 (co-author: Sh. Khosravi);

*A New Class Of Inhomogeneous Solutions*, Abstracts of Contributed papers, Intern. Symposium on Cosmology, Madras, India, 1994;

*Cylindrically Symmetric Thin Walls*, Abstracts of Contributed Papers, Intern. Conf. On Grav. & Cosmology, Ahmedabad, India, 1991;

*Gravitational field of Static Domain Walls*, Sharif University of Technology Report, 1990;

*Equivalence of Transport- and Radar Synchrony in General relativity*. Abstracts of Contributed Papers, GR12, 1989;

*Test Theory of Special Relativity: What It Is and Why We Need It*, 1988, ICTP Internal Report, IC/88/55;

*Distribution Function of a Collisionless Gas in the Most Symmetric Space - Times*. Abstracts of Contributed Papers, Intern. Conf. On Grav. & Cosmology, Goa, India, 14-19 Dec. 1987;

*Introduction to Cosmology, Paper Presented at Spring School on Cosmology, Amir-Kabir University of Technology, Tehran, Iran, 1986;*

*Distribution Function of a Dilute Gas In de Sitter Space-Time, Abstracts of Contributed Papers GR11, 1986;*

*Finite Fluid Spheres are too Rigid to be Perturbed. Abstracts of Contributed Papers, GR9, Vol. 2, 1980;*

*Alternative Two-Tensor Theory of Gravitation. Abstracts of Contributed Papers, Topical Meeting on Gravitation and Field Theory, 13-16 July, 1971, ICTP.*

## I.7 Honors /Awards

"Dr. Amin's Lifelong Achievement Award" given by SUTA (Sharif University of Technology Association), 2014.

Associate Member, Academy of Persian Language and Literature, 2011/1390;

***spicilia mansourii Sohrabi, sp. nov.*** (Fig. 00) Mycobank MB 518502; IRAN: Golestan National Park, Mirzabaylou towards Almeh valley; 37°21'N, 56°12'E, 1300 m; May 2008, *Sohrabi & Ghobadnejhad 15077* (holotype IRAN; isotypes H, TARI, hb. Sohrabi MS015088).

**Etymology:** The species is named in honor of Reza Mansouri, Iranian physicist who made significant contributions to the development of science in Iran.

PHOTOTAXA, 2010. See also:

<http://hundrednewlichens.lifedesks.org/pages/531>

Member, TWAS council, 2007-2010;

Fellow, the Academy of Sciences for the Developing World (TWAS), 2000;

Alexander v. Humbolt Fellow, Oct. 1995 - Oct. 1996;

Recipient of the prize for scientific periodicals from the Ministry of Culture and Guidance for publication of the Iranian Journal of Physics, 1994;

Recipient of "honorable mention" for the paper "Cylindrically Thin Walls in General Relativity" from Gravity Research Foundation, 1993;

Member, Academy of Sciences of I.R.I., 1992;

Alexander v. Humbolt Fellow 1978-79;

Abdus-Salam Prize for Iranian Scientists, 1989;

Associate Member of ICTP, 1987-1993.

## I. 8 Editorial Activities

Chief-(and Founding-) Editor, *Science Communication Quaterly* (Persian quarterly), 2012-;

Chief-Editor: *Rahyaft* (Science Policy Quaterly), NRISP, Tehran, 2005-2007;

Chief-Editor: *Bulletin of Research and Technology* (in Persian), Ministry of Science, Research and Technology, 2001-2006;

Founding- and Chief-editor: *Daneshgar* (in Persian): an Iranian Popular Journal for Science and Technology, 2001 -2006;

Director: Mooton Institute, 1998-2000

Founding editor: *Iranian Journal of Physics Research* (IJPR). Founded: 1995-;

Referee of: *Mathematical Review*;

Referee for: *Classical and Quantum Gravity*, Journal of Physics A, Physics Letters A, Foundation of Physics;

Member: Editorial advisory Board, *Rahyaft* (Science Policy Quaterly), NRISP, Tehran, since 1992;

Founder and Member of the Editorial Board: *Nojum* (in Persian): An Iranian Journal of Astronomy since 1991;

Founder: *Iranian Journal of Physics* (in Persian), 1983-2010;

Editor-in-chief: *Iranian Journal of Physics* (in Persian), 1983-2010;

Member: Editorial Advisory Board, *Iranian Journal of Mathematics* (Nashr-e Riazi).

## I.9 PhD-Theses Supervised

M. Parsi-Mood, 2013: *Gravitational Lensing in a Cosmological Background*

J. T. Firoozjaee, 2012: *Cosmological Black Holes*

E. Kourkchi, 2011 (co-advisor);

S. Ghassemi, 2005: *Topics in Brane Cosmology*;

S. Khakshournia, 2002: *The Most General Distributoinal Formulation of Gluing Space-time Manifolds and its Applications*;

S.Rahvar, 2002: *Microlensing and relativistic relation between peculiar velocity and density contrast*;

M. Setare, 2001: *Casimir Effect and Cosmology*;

K. Nouzari, 1999: *Application of Coloumbeau Algebra in Gluing Manifolds within GR*;

F. Nasserri, 1999: *Model Universes with Variable Space Dimensions and their Cosmological Consequences*;



M. Khorrami, 1993: *Formulation of Discrete Space-Time Physics*;

M. Mohazzab, 1993: *Topics on Modern Cosmology*;

## **I.10 Organizational/ Synergistic Contributions**

Member, Council of IPM School of Particle Physics and Accelerators, 2011-;

Organizer, INO workshop on Instrumentation and Foci- Aug. 30- Sep. 1, 2008

Organizer, INO workshop on Science Case- March 12-14, 2008

Organizer, INO workshop on Site Selection- Aug. 18-21, 2007

Organizer, IPM School and Workshop on Gravitational Weak Lensing and Photo-z Techniques- April 22-28, 2009 (ISWLP09)

Organizer, IPM School and Workshop on Optical Data Reduction- Oct. 11-20, 2008 (ODRW08)

Organizer, IPM School and Workshop on Weak Lensing and Photo-z Techniques- July 2-8, 2008 (ISWLP08)

Organizer, IPM School and Workshop on Gravitational Lensing Techniques- March 8-11, 2008 (ISGLT08)

Organizer, IPM School and Workshop on Gravitational Lensing Techniques- Jan.9-11, 2008 (ISGLT07) - Part II

Organizer, IPM School and Workshop on Gravitational Lensing Techniques- Nov. 24-29, 2007 (ISGLT07) - Part I

Organizer, IPM Cosmology School and Workshop- June 2-9, 2007 (ICSW07)

President, Iranian Association for Popularization of Science, 2008;

Iranian National Observatory (INO) project director, 2007-;

Chairman, School of Astronomy and Astrophysics, IPM, 2007-;

Member, GRG Committee 2007-2013;

Member, TWAS council, 2007-2009;

Member, IPM Council, 2007-;

Member, Council of IPM School of Physics, 2007-;

Member, Reviewers Committee, Center for Special Studies and Programs (CSSP), Egypt, 2005-;

Member, Higher Council for Science, Research and Technology, Tehran, 2005- 2008;

Member, Astronomy and Space Science Committee, TWAS, 2005-;

Member, International Advisory Committee, World Conference on Physics and Sustainable Development, Durban, Oct 31- Nov 2, 2005;

Member, SESAME International Council 2004-;

Chairman, Iranian National Observatory (INO) Steering Committee, 2004-;

Member, International Coordinating Committee of the Marcel Grossmann Meetings on General Relativity.

Director, ISMO, 2003 -2005;

Chairman, SESAME Training Committee, 2002 – 2006;

Member, SESAME Council, 2003 -;

Vice- President, Council for Research & Technology, Ministry of Science, Research and Technology, 2002 – 2005;

Chairman, commission for basic sciences, Khawrazmi youth prize, 2001-2004;

Member, board of referees, Khawrazmi international prize, 2001-2004;

Chairman, commission for basic sciences, Khawrazmi international prize, 2001-2004;

Under- Secretary of State for research, Ministry of Science, Research and Technology, 2001- 2005;

Director, National Research Institute for Science Policy (NRISP), 2001-2004;

Chairman, Coordinating Committee for Iran's contribution to CMS detector of LHC at CERN, 2000- 2006;

Co-Chairman, Training Committee, SESAME (Synchrotron Light for Experimental Science and Applications in the Middle East), 2000 – 2002;

Member, International Interim Council of SESAME, 1999 – 2003;

Director, International Scientific Meetings Office, Iran, Ministry of Culture and Higher Education, 1999 – 2002;

Member, Council for International Scientific Cooperation, Ministry of Culture and Higher Education, 1999-2004;

Member (Life-), International Society of General Relativity and Gravitation;

Member, Austrian Physical Society;

Member, the Physics Society of Iran;

Member, International Astronomical Union;

Member, the Astronomical Society of Iran;

Associate Fellow, ICTP 1988-1993;

Co-Chairman, Abdus-Salam Prize for Iranian Scientists;

President, the Physics Society of Iran 1984-1989, 1992-1996, 2000 – 2005;

Organizer, Annual Iranian Physics Conference 1984-1989, 1992-1996, 2000-2005;

Chairman, Department of Physics, Sharif University of Technology 1983-1985, 1991-1993;

Member, Iranian Research Council 1988 – 2003;

Member, Board of Trustees of the Academy of Sciences of the Isl. Rep. of Iran, 1992-1995;

Chairman, Commission for Basic Sciences of the Iranian Research Council 1989 – 2003;

Chairman, Commission for Earthquake of the Iranian Research Council 1991-1994;

Member, Higher Council of the Center for Science and High Technology, Kerman (Iran), 1992-1994;

Director, Bureau for International Workshops, Ministry of Culture and Higher Education, 1993-1994.

## II. Other Activities

### II.1 Science Popularization

Founding- and chief-editor of *Science Communication Quarterly* (in Persian). 2012-;

Founding- and chief-editor: *Daneshgar* (in Persian): an Iranian Popular Journal for Science and Technology, 2001 .

Chairman, Scientific Committee of Tehran Museum of Science, 2001-2002.

Member, Board of Trustees of Tehran Museum of Science. 2001 – 2002.

*Physics without Physics* (in Persian): Physics for liberal arts, P.S.I. - Publishing, 2001.

Founding Member, Society for Dissemination and Popularization of Science in Iran, 2000.

Chairman, National Council for Millenium Eclipse, 1999.

Popular book on cosmology called "*Falak-Ra-Saghf*", Tarh-e No Publishing, Tehran, 1999.

Initiator and member of the prize committee for "Kish Prize for Popularization of Science", 1997-.

Science Center in Iran: a detailed study, 1994-5. The project involved 25 experts in all area of science, technology, and education and was administered by the PSI for the Tehran Municipality.

Museum of Islamic Science: a detailed study for Tehran Municipality, 1994-5.

Almost Regular interviews with radio and television of any recent scientific event.

Numerous Public Lectures in different media, high schools, and colleges in the last 25 years.

A Series of 10 radio broadcasts within 2 weeks in 1993 on "the Role of Terminology and Scientific Language in the Economic Development".

A Series of 25 radio broadcasts within one month in 1991 on Cosmology.

President, Council for Research and Technology Planning, Fouth 5- Year Economic Development Plan of Iran, 2003.

## II. 2 Organizational and Editorial Contributions

Member, Board of Trustees of Research Center for Microelectronics, 2005-2007.

Member, Board of Trustees of Institute for Theoretical Physics and Mathematics (IPM), 2005-2007.

Member, Board of Trustees of Persian Gulf Biotechnology Research Center-, 2002-2006.

Member, Council for the Advancement of Science in Iran - 1400 (Iran-2021), 2001-2003.

Scientific Consultant, Kish Free Zone Organization, 2000-2002.

Member, Scientific Council of Persian Great Encyclopedia, 1999-2002.

Member, Higher Council of Iranian National Library, 1999-2006.

Member, Council for Science and Technology Planning, Third 5-Year Economic Development Plan of Iran, 1998-1999.

Member, Council for Terminology, Academy of Persian Language and Literature, Tehran, 1997-.

Founding Director, Center for Translation and Publication of (Classical) Books-MOTUN-, 1996-1998.

Member, Council of IUP, 1984-2004, 2005-.

Head, Physics Group at IUP 1980-1993. (IUP is a governmental organization responsible for publishing high quality and best edited university books).

Member, Physics term-selecting committee at IUP, 1980-1993.

Deputy director, IUP, responsible for editorial section, 1985-1992.

Member, Council of IUP.

Regional Editor, Info term (International Information Center of Terminology), Vienna, Austria.

Member, Board of Trustees of the Public Libraries of Iran, 1991-1995.

## II.3 Projects carried out

*An investigation on the accuracy of concepts introduced in Iranian non-text scientific books, written for pre-school and first years of primary school children, 2001-2002. Project carried out for the Ministry of Education.*

*Compilation of standards for National, Regional, and International conferences in Iran*, 2001-2002. Project carried out for the Ministry of Sciences, Research and Technology.

*University as a Center of Excellence or Island of Quality*, 2000-2001. Project carried out for the Ministry of Science, Research, and Technology, Tehran.

*Museum of Islamic Science*: a detailed study for Tehran Municipality, 1994-5.

*Science Centers in Iran: a detailed study*, 1994-5. The project involved 25 experts in all area of science, technology, and education and was administered by the PSI for the Tehran Municipality.

*Terminology Work in Iran and the World*, Academy of Persian Language and Literature, 1993-4

## **II.4 Translations (into Persian)**

*Relativity: Special, General, and Cosmological*, by W.Rindler, Springer Verlag, 1983, second edition. Published by IUP, 1997.

*Weisse Zwerge-Schwarze Loecher (White Dwarfs and Black Holes)*, by R. Sexl, ISUP 1981. Second edition, 1991.

*A Shorter course in Theoretical Physics*, Vol. 1, Mechanics & Electromagnetism, by Landau & Lifshitz, IUP 1985.

*Assumption and Myth in Physical Theory*, by Herman Bondi, Sharif University Press, 1979.

## **II.5 Publications/ Contributions**

*Physics Now*, in *A World of Science in the Developing World*, Nature Supplement on the occasion of TWAS 25th anniversary 2008, p.38;

*Broken Promises or Promises in Vacuum*, Archives of Iranian Medicine 2008; 11 (5): 559-560;

*How an Obsolete Concept of Science Impedes the Development of Islamic Countries: The example of Iran*, APS Forum on International Physics, December, 2007.

*Science in Islam: Which Way Forward*, News from ICTP, Autumn 2006, No. 118;

*A conversation with Dr. Reza Mansouri*, Council of Foreign Relations, Washington, DC, September 14, 2006.

*Science and Technology in the Moslem World Policy towards the USA*, 2005, NRISP, Summer 05/84, 8.S.M.S, Tehran.

*International Scientific Collaboration of Iran: the Emerging Structure*, 2004, NRISP , 22.S.M.In, (Co author: Shapour Etemad and Yahya Emami).

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*The Role of Higher Education in Iran and the Society's Needs*, paper presented at the Regional Seminar on Higher Education in the 21st. Century, National Commission of UNESCO, Tehran, March 18-20, 1998.

*Terminological Planning: An Iranian Experiment*, 1996, International Congress on Terminology and Knowledge Engineering, Vienna, 26-29 Aug.

*Terminology Work in Iran and in the World*, 1995, Research Project Carried out for the Academy of Persian Language and Literature, (Project leader).

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*Gebets-und Fastenzeiten fuer Oesterreich, 1968*, Islamische Iranische Studentengemeinschaft in Wien, Vienna, Austria.

## II.6 Books

*Iran in Future, viewpoints of three schoolars* : Ashayeri, Ghaninejad, and R. Mansouri, Tehran, Dibayeh publishing, first printing 2007 /1386, second printing 2010/1389.

*Iran raa Cheh Konam* (in Persian: *What should I do with Iran*), 2006, Kavir Publishing, Tehran.

*Physics without Physics*, (in Persian): *Physics for Liberal arts*, 2001, PSI Publishing.

*Iran 1427 (2050): National Determination for Scientific and Cultural Development* (in Persian), 1994, Tarh-e-No Publishing, Tehran, second printing 2000, second edition and sixth printing 2006.

*Falak Raa Saghf* (in Persian), a popular book on cosmology, 1999, Tarh-e-No Publishing, Tehran.

*Scientific Development of Iran* (in Persian), 1994, UNESCO Publication, Tehran.

*English-Persian Dictionary of Science and Technology*, 1994, chief-editor, IUP, Tehran.

*English-Persian Dictionary of Physics*, chief-editor, IUP, Tehran 1987, second edition 1998.

## II.7 Invited talks/ lectures

COMSTEK, Islamabad, *Training Course on Science, Technology & Innovation*, 6-24 April, 2009;

NAS, Washington, *Sustainable Development in the Moslem World Needs Excellence in Science and Technology: Iran as a case study*, September 13, 2006, invited by AAAS, Center for Science, Technology and Security Policy;

MIT, Boston, *Science in Iran: Status Quo and its Future*, Sept. Sept 11, 2006; invited by ISG;

Stanford University, Center for Iranian Studies, *the Concept of Science in the Moslem World*, Sept. 15, 2006, invited by ISG;

University of Toronto, *the Role of Excellence in the Future of Science in Iran*, May 23, 2006, invited by Knowledge Diffusion Network.

## Bio data

**1. Date of birth:** 8 January 1948

**Place of birth:** Tehran/Iran

**Nationality:** Iranian

**2. Education:**

Primary School: Schariat School, Tehran, 1954-1959.

High School: Rahnamaa High School, Tehran, 1959-1965.

University: University of Vienna, Ph. D. In Physics and Astronomy, 1965-1972.

**3. Scientific Employment and Academic Responsibility:**

INO project director, IPM, 2007-

IPM School of Astronomy, Chairman, 2007- 2011

McGill University, Department of Physics, July 2005-August 2006, on sabbatical leave.

University of Potsdam, Germany; Oct. 1995- Oct. 1996, Alexander von Humboldt Fellow.

Sharif University of Technology, Iran, Chairman, Department of physics 1983-1985, 1991-1993.

Sharif University of Technology, Iran, Professor of Physics 1989-.

Vienna University, Institute for Theoretical Physics, September 1986-October 1987, on sabbatical leave.

Sharif University of Technology, Iran, Associate Professor 1979-1989.

University of Cologne, Germany, 1978-79, Alexander von Humboldt Fellow.

Vienna University, Austria, Assistant Professor 1972-1977.

Sharif University of Technology, Faculty, 1979- Present