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▪ Education and Training

December 15, 2001 – December 17, 2004	□ Received Ph. D. in Physics from Università degli Studio di Trento, Trento, ITALY.
August 02, 2001- December 14, 2001	□ Joined Fiber Optics Gr., Dept. of Physics, Indian Institute of Technology, Delhi, New Delhi, INDIA as a Project Associate on the project “Research and development in non-invasive optical fiber based near infrared spectroscopy for assessing brain activity”.
July, 1999 – April, 2001	□ Received the Master of Technology in Laser Science and Applications from Devi Ahilya Vishwavidyalaya, Indore, (M.P.), INDIA in 2001 (86.3%, First division with distinction) Dissertation of this was pursued at Physical Research Lab., Ahmedabad (Gujrat), INDIA
June 17, 1999	□ Received the Master of Science in Physics with specialization in Nuclear Physics from Banaras Hindu University, Varanasi, (U.P.), INDIA. (62.3%, First division)
December 09, 1996	□ Bachelor of Science (Physics and Mathematics) from Purvanchal University, Jaunpur (U.P.), INDIA in 1996. (58.7%, second division)
May 19, 1993	□ Intermediate school, U.P. Board, Allahabad (U. P.) INDIA (59%, second division)
July 30, 1991	□ High school, U. P. Board, Allahabad (U. P.) INDIA (71.5%, First division)

▪ Experimental techniques experience

Fourier Transform Infrared (FT-IR) absorption Spectroscopy, Raman Spectroscopy, Surface Enhanced Raman Spectroscopy (SERS), Scanning Electron Spectroscopy, Profilometer, Thermal Gravimetry Analysis (TGA), Optical Absorption Spectroscopy, X-rays Diffraction (XRD) measurement (surface knowledge), Different type of high temperature furnaces, Synthesis of nanoCeramics by sol-gel techniques and Spin coating.

▪ Project Experience

Project Title	Professor/Collaborator
Study of $^{24}\text{Mg}(n,p)^{24}\text{Na}$ Reaction using High Resolution HPGe Spectrometer (1999)	Prof. Laxman Chaturvedi

Probing of atmosphere using LIDAR (2001)	Prof. Harish Chandra
Study of micro-structure and optical properties of Silicon oxide-based materials by vibrational spectroscopy methods (2001-2004)	Prof. Gino Mariotto
Synthesis and characterization of SiOC samples by sol-gel techniques (2004-2005)	Prof. Gian Domenico Sorarù
Surface Enhanced Raman Spectroscopy (SERS) for Biomedical Applications (Jan 2006-)	
Language known	
Mother Tongue	<input type="checkbox"/> Hindi
Other Languages	<input type="checkbox"/> English <ul style="list-style-type: none"> ▪ Reading Skills: excellent ▪ Writing Skills: good ▪ Verbal Skills: good <input type="checkbox"/> Italian <ul style="list-style-type: none"> ▪ Reading Skills: good ▪ Writing Skills: good ▪ Verbal Skills: good
List of Publications	
<ul style="list-style-type: none"> □ G. D. Sorarù, S. Modena, P. Bettati, Gobind Das, G. Mariotto, L. Pavesi, <i>Si nanocrystals obtained through polymer pyrolysis</i>, Applied Physics Letter 83 (4), (2003) 749-751. □ N. Daldosso, G. Das, G. Dalba, R. Grisenti, G. Mariotto, L. Pavesi, F. Rocca, F. Priolo, G. Franzo, A. Irrera, M. Miritello, D. Pacifici and F. Iacona, <i>Silicon Nanocrystal Nucleation as a Function of the Annealing Temperature in SiO_x Films</i>, in the proceeding of Material Research Society, 770, (2003) I1.3.1-I1.3.6. □ T. Barone, M. Castriota, E. Cazzanelli, G. Das, G. Mariotto, L. M. Montoro, and J. M. Rosolen, <i>Raman Microprobe analysis of Carbon Nanotubes synthesized by Arc-Method using metallic and oxide catalysts</i>, in the proceeding of GNSR-2003, Perugia, ITALY □ G. Das, N. Daldosso, G. Mariotto, L. Pavesi, A. Irrera, M. Miritello, G. Franzo, and F. Iacona, <i>Spectroscopy characterization of SiO_x/Si thin film using FTIR and Raman Spectroscopy</i>, in the proceeding of GNSR-2003, Perugia, ITALY. □ G. Das, G. Mariotto and A. Quaranta, <i>Vibrational spectroscopy characterization of low-dielectric constant Si-O-C:H film prepared by PECVD technique</i>, Material Science in Semiconductor Processing 7, (2004) 295-300. □ G. Mariotto, G. Das, A. Quaranta, G. Della Mea, F. Corni, and R. Tonini, <i>Vibrational spectroscopy study of Ar⁺ -ion irradiated Si-rich oxide films grown by plasma enhanced chemical vapour deposition</i>, Journal of Applied Physics 97, (2005) 113502-113511 □ G. Das, G. Mariotto, A. Quaranta, <i>Micro-structural evolution of thermally treated low-dielectric constant SiOC:H films prepared by plasma enhanced chemical vapour deposition</i>, Journal of Electrochemical Society 153 (3), (2006), F46-F51 □ N. Patel, A. Kale, G. Das, P. Mosaner, R. Checchetto, A. Miotello, <i>Deuterium thermal desorption from Ni rich deuterated Mg thin films</i>, accepted for publication in Renewable Energy. □ N. Daldosso, G. Das, S. Larcheri, G. Mariotto, L. Pavessi, G. Dalba, F. Priolo, F. Iacona, and F. Rocca, <i>Silicon nanocrystal formation in annealed silicon-rich silicon oxide films prepared by Plasma Enhanced Chemical Vapour Deposition</i>, Journal of Applied Physics 101 (2007) 113510. □ Gobind Das, Paolo Bettotti, Luigi Ferraioli, Rishi Raj, Gino Mariotto, L. Pavesi and Gian Domenico Sorarù, <i>Study of the pyrolysis process of an hybrid CH₃SiO_{1.5} gel into a SiCO glass</i>, submitted to Vibrational Spectroscopy. 	

- E. Cazzanelli, M. Castriota, S. Marino, N. Scaramuzza, J. Purans, A. Kuzmin, R. Kalendarev, G. Mariotto, and **G. Das**, *Characterization of rhenium oxide films*, accepted for publication to **Solar Energy Materials & Solar Cells**.
- **Gobind Das**, Luigi Ferraioli, Paolo Bettotti, F. De Angelis, Gino Mariotto, L. Pavesi, and E. Di Fabrizio, *Si-nanocrystals/SiO₂ thin films obtained by pyrolysis of sol-gel precursors*, submitted to **Thin Solid Films**.
- **Gobind Das**, F. De Angelis, S. Cipolloni, D. Simeone, L. Mariucci, G. Fortunato, and E. Di Fabrizio, *Analysis of the interactions between pentacene based Field Effect Transistors and air using micro-Raman Spectroscopy and Electrical measurement*, submitted to **Thin Solid Films**.
- F. De Angelis, **Gobind Das**, S. Cipolloni, and E. Di Fabrizio, *Analysis of the interactions between pentacene film and air by means of Raman Spectroscopy*, Submitted to **Applied Physics Letters**.
- **Gobind Das**, Mohan Kumar HG, Francesco De Angelis, Francesco Gentile, Giovanni Cuda and Enzo Di Fabrizio, *In depth characterization of proteins vs. temperature using Near-IR excited micro-Raman Spectroscopy*, submitted to **Journal of Physics and Chemistry**.
- M. Castriota, E. Cazzanelli, **G. Das**, R. Kalendarev, A. Kuzmin, S. Marino, G. Mariotto, J. Purans, and N. Scaramuzza, *Proton Presence and Motion in Rhenium Oxide Films*, submitted to **Molecular Crystal & Liquid Crystals**.
- **Gobind Das**, Silke Krol, Marco Gaspari, Alberto Diaspora, Giovanni Cuda, and Enzo Di Fabrizio, *Molecular Stability characterization of Doxorubicin by varying pH value and on addition of calcium carbonate using spectroscopic techniques*, under process of submission.

■ Posters and Presentations

- **G. Das**, N. Daldosso, G. Mariotto, L. Pavesi, A. Irrera, M. Miritello, G. Franzò, and F. Iacona, *Spectroscopy characterization of SiO_x/Si thin film using FTIR and Raman Spectroscopy*, **GNSR 2003, Perugia, Italy**.
- T. Barone, M. Castriota, E. Cazzanelli, **G. Das**, G. Mariotto, L.M. Montoro, and J.M. Rosolen, *Raman Microprobe analysis of Carbon Nanotubes synthesized by Arc-Method using metallic and oxide catalysts*, **GNSR-2003, Perugia, Italy**.
- **G. Das**, G. Mariotto, and A. Quaranta, *Vibrational spectroscopy characterization of low-dielectric constant Si-O-C:H film prepared by PECVD technique*, **E-MRS-2004 meeting, Strassbourg, France**.
- **Gobind Das**, Rishi Raj, Gian Domenico Soraru and Gino Mariotto, *Vibrational spectroscopy study of the pyrolysis process of an hybrid gel into a SiCO glass*, oral presentation at **GNSR 2005, Cosenza, Italy**.
- **Gobind Das**, R. Peña-Alonso, P. Bettotti, G. Mariotto, L. Pavesi, R. Raj, G.D. Sorarù, *Preparation and characterization of Photo- Luminescent Si-Nanocrystals Embedded in SiO₂ by using Polymer Pyrolysis*, oral presentation at **30th International Conference & Exposition on Advanced Ceramics and Composites, Cocoa Beach, USA, 2006**
- **Gobind Das**, Francesco De Angelis, S. Cipolloni, D. Simeone, L. Mariucci, G. Fortunato, E. Di Fabrizio, *Analysis of the interaction between the Pentacene film and Oxygen using Raman spectroscopy and electrical measurement*, oral presentation at **E-MRS 2007, Strassbourg, France**.
- **Gobind Das**, L. Ferraidi, P. Bettotti, F. De Angelis, G. Mariotto, L. Pavesi, and G. D. Soraru, E. Di Fabrizio, *Si-nanocrystals/SiO₂ thin films obtained by pyrolysis of sol-gel precursors*, poster presentation at **E-MRS 2007, Strassbourg, France**.
- **G. Das**, F. De Angelis, C. Liberale, F. Romanato, M. Tormen, D. Cojoc, L. Businaro, M. Patrini, M. Galli, C. Andreani, and E. Di Fabrizio, *Fabrication and characterization of plasmonic nanostructures for applications in biophotonics*, poster presentation at **SPP3 conference, Dijon, France**.

<p>▪ Conferences and workshops</p> <ul style="list-style-type: none"> ❑ <i>International conference on Theoretical Physics</i> in Physical Research Laboratory, Ahmedabad. ❑ <i>SERC school</i> organized in Indian Institute of Tropical Meteorology, Pune from 07 June to 06 July 2001. ❑ IV Symposium on "SiO₂ and advanced dielectrics", from September 16 – 18th, 2002 held in Trento, Italy ❑ <i>National Workshop on Nanostructured materials</i> from December 5-6, 2002 organised by Indian Institute of Technology, Delhi, New Delhi, India. ❑ <i>Optoelectronic & Photonic Winter School</i> from 22nd – 28th February 2003 held in Trento, Italy. ❑ <i>Scuola Nazionale GNSR</i> from 15-17th September 2003 in Perugia, Italy. ❑ <i>18th National Congress GNSR</i> from 17-19th September 2003 held in Perugia ❑ <i>E-Material Research Society-2004 spring meeting</i>, Strassbourg, France from 24-28th May 2004. ❑ <i>Optical Interconnects, 3rd Optoelectronic and Photonic Winter School</i>, Sardinia, Trento, Italy from 27th February 2005 to 4th March 2005. ❑ <i>GNSR 2005</i>, Cosenza, Italy from 9-11 November, 2005 ❑ <i>EMRS-2007</i>.Spring meeting, Strasbourg, France from May 27th to June 1st, 2007.
<p>▪ Bachelor thesis co-supervisor</p> <ul style="list-style-type: none"> ❑ Bachelor thesis with title "<i>Analisi di miscele proteiche mediante spettroscopia Raman</i>" by Dario Datri, University of Catanzaro, ITALY under my co-supervision. The thesis was discussed on July 24th, 2006.
<p>▪ Awards and Extra-curriculum activities</p> <ul style="list-style-type: none"> ❑ <i>Received "National Scholarship" during year 1991-1993.</i> ❑ <i>Received "National Cadet Corp Certificate B and C" in year 1995 and 1996.</i> ❑ <i>Received "Scholarship for pursuing doctorate degree provided by Italian Ministry of External Affairs, Italian Embassy in New Delhi and University of Trento, Italy" from Dec. 15, 2001 to Dec 17, 2004.</i> ❑ <i>Received "Young Scientist Award" for the best presentation during European-Material Research Society - 2004.</i> ❑ <i>Received the "Post-doc fellowship" from Jan 2005 - Dec. 2006 at Department of Materials Engineering and Industrial Technologies, Faculty of Engineering, Università degli studi di Trento, Trento, ITALY.</i> ❑ <i>Received the the "Post-doc fellowship" from Jan 2006 - Aug. 2007 to carry out the research at Dipartimento di Medicina Sperimentale e Clinica, Università degli "Magna Graecia" di Catanzaro, Catanzaro, ITALY.</i>
<p>▪ References</p>

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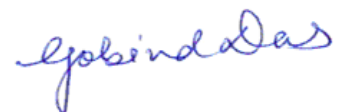
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