

CURRICULUM VITAE

NAME: Vladimir A. BORODIN

DATE AND PLACE OF BIRTH: June 21, 1955, Moscow, Russia

CITIZENSHIP: Russia

AFFILIATION AND OFFICIAL ADDRESS

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EDUCATION / DEGREES

M.Sc. (Theoretical Nuclear Physics), Moscow Engineering Physics Institute
(Technical University), Moscow, 1978.

Ph.D. (Solid State Physics), "The Effect of Microscopic Processes in Dislocation
Cores on Dislocation Climb and Irradiation Creep of Materials",
Kurchatov Institute of Atomic Energy, Moscow, 1986.

D.Sc. (Solid State Physics), "Spatially Non-Uniform Rate Theory and its Application
to Microstructural Evolution in Materials", RRC Kurchatov Institute,
Moscow, 2000.

CAREER / EMPLOYMENT

Russian Research Centre Kurchatov Institute, Institute of General and Nuclear
Physics, leading scientist, 2005 – now

Russian Research Centre Kurchatov Institute, Institute of General and Nuclear
Physics, senior scientist, 1988 – 2005

Kurchatov Institute of Atomic Energy, Department of General and Nuclear Physics,
research fellow, 1986-1988

Kurchatov Institute of Atomic Energy, Department of General and Nuclear Physics,
junior scientist, 1983-1986

Kurchatov Institute of Atomic Energy, Department of Plasma Physics, research
engineer, 1981-1983

Kurchatov Institute of Atomic Energy, Department of Reactor Technology, Ph.D.
student, 1978-1981

SPECIALIZATION

Materials Science (theory / computational)

SPECIFIC SKILLS

Programming in Object PASCAL (DELPHI) and FORTRAN.

Preparation of texts and presentations with MS Office (Word, Excel, PowerPoint),
LaTeX, CorelDraw.

Fluent in English. Speak and write French and German.

INTERNATIONAL COLLABORATIONS

Hahn-Meitner Institute (Berlin, Germany), 1991- 1993

'Theory of microstructural evolution in irradiated metals'

Institute for Ion Beams and Material Research, Forschungszentrum Rossendorf (Dresden, Germany), 1995 - 2003

'Fundamental studies of precipitate growth and self-organization in ion-implanted silicon and silicon-based materials'

Center of Neutron Spectroscopy and Mass Spectroscopy, University Paris-Sud (Paris, France), 1999 - now

'Kinetics of metal-silicide precipitates in silicon under ion implantation'

Institute for Safety Research, Forschungszentrum Rossendorf (Dresden, Germany), 2001 - 2006

"The effects of defect microstructure kinetics on the radiation-induced embrittlement mechanisms in RPV steels "

Institute of Applied Materials, Karlsruhe Institute of Technology (Germany), 2004-now

"Computer simulation of defect microstructure kinetics in ferritic-martensitic steels and other materials for fusion technology"

MEMBERSHIPS IN SCIENTIFIC SOCIETIES

1995-1997 NY Academy of Science

2009 –now European Materials Research Society

HONORS / AWARDS

Yearly awards for Junior Researches of Kurchatov Atomic Energy Institute (1983,1989)

PRINCIPAL RESEARCH INTERESTS

- *Basic Aspects of Microstructure Development in Irradiated and Ion-Implanted Materials*
- *Simulation of Defect Diffusion and Precipitation Kinetics in Solids*
- *Microscopic Theory of Radiation Effects in Metals*
- *Physical Mechanisms of Fracture of Irradiated Structural Materials*
- *Effects of Ultra-Short Electronic Excitations on Property Modifications of Metallic Targets*
- *Atomic Structure of Disordered Solids*