# C U R R I C U L U M V I T A E

# Professor, Doctor DAVID NATROSHVILI

### PERMANENT ADDRESS:

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LAST NAME:	Natroshvili
FIRST NAME:	David
DATE OF BIRTH:	3.08. 1948
PLACE OF BIRTH	Zemo-Machkhaani, Republic of Georgia
MARITAL STATUS	: Married, Two children
PDUGATION	

### EDUCATION:

School in Zemo-Machkhaani - 1955-1965. Graduated from the Tbilisi State University in June 1970, Diploma (M.D.) in Mathematics. Post graduate study in Tbilisi State University and I.Vekua Institute of Applied Mathematics (Tbilisi) 1970-1973. Ph.D. (Candidate of Sciences) in Equations of Mathematical Physics and Theory of Elasticity, Tbilisi State University, 1973: "Explicit Solutions of Boundary Value and Contact Problems of the Elasticity Theory" (under supervision prof. M.Basheleishvili). Doctor (Doctor of Physical and Mathematical Sciences) in Equations of Mathematical Physics, Tbilisi Mathematical Institute of Georgian Academy of Sciences, 1985. Thesis: "Investigation of Boundary Value and Initial Boundary Value Problems of the Theory of Elasticity and Thermoelasticity for Anisotropic Bodies by Means of Potential Methods". The full list of publications comprises more than 140 scientific papers and text books. LANGUAGES SPOKEN: Georgian (native), English, Russian.

## EMPLOYMENT:

1973-1974 - Junior researcher at the I.Vekua Institute of Applied Mathematics, Tbilisi.

1974-1985 - Senior researcher at the I.Vekua Institute of Applied Mathematics, Tbilisi.

1985-1987 - Chief researcher at the I.Vekua Institute of Applied Mathematics, Tbilisi.

1987-present - Head of the Department of Mathematics (99) at the Georgian Technical University, Tbilisi.

Simultaneously:

1973-1985 - Part-time assistant professor at the Tbilisi State University (Faculty of Mathematics).

1985-1987 - Part-time professor (half of the full staff) at the Georgian Technical University, Tbilisi.

1987-present - Chief researcher at the I.Vekua Institute of Applied Mathematics (half of the full-staff).

2004-2006 - Honorary Visiting Professor (UK, Glasgow Caledonian University, School of Computing and Mathematical Sciences)

# VISITED POSITIONS AND INVITED TALKS:

Conferences on Problems and Methods in Mathematical Physics: CHEMNITZ (Germany) - 1983, 1988, 1993, 1999;

Conferences in Mechanics, Differential Equations, Boundary Element Methods and Potential Theory:

SOFIA (Bulgaria)- 1977, ROUSSE (Bulgaria)- 1989 SAPPORO (Japan) - 1990, TULSA (USA) - 1991, BRAUNSCHWEIG (Germany) - 1993, SCHWERTE (Germany) - 1993, TEHERAN (Iran) - 1994, LISBOA (Portugal) - 1994, OBERWOLFACH (Germany) - 1994, STUTTGART (Germany) - 1996, 1999, FREUDENSTADT (Germany) - 1996, WARSAW (Poland)-1996, PARIS (France) - 1996, NEWARK (USA) - 1997, ROCHESTER (USA) - 1997, MANCHESTER (UK) - 1997, HOUGHTON (USA) - 1998, STUTTGART (Germany) - 1999, BATH (UK) - 2000, KARLSRUHE(Germany) - 2000, SAINT ETI-ENNE (France) - 2002.

Invited talks and lectures:

Guest of the DFG (Deutscheforschungsgemeinschaft - Germany), SFB 404 (Sonderforschungsbereich - Germany), and DAAD (Germany):

CHEMNITZ (1988, 1992, 1993, 1994, 1995, 1996, 1998), STUTTGART (1992, 1994, 1995, 1996, 1997, 1998, 1999, 2003, 2004), DARMSTADT (1992, 1994, 1996), GÖTTINGEN (1994, 1998), BERLIN (1994, 1995, 1996, 1997), KARLSRUHE (2004), POTSDAM (2004).

Guest of the London Mathematical Society (UK): Universities of BATH, SALFORD (MANCHESTER), GLASGOW (1997).

Guest of the Manchester Metropolitan University (UK): MANCHESTER (1998).

Guest of the Royal Society (UK): BRUNEL university (Uxbridge), Universities of BATH, LEEDS (2000-2001).

Guest of the Stuttgart University (GERMANY) (NATO Collaborative Linkage grant): STUTTGART (2000), STUTTGART (2002).

Guest of the University of Athens (Greece): ATHENS (2001, 2004).

Honorary Visiting Professor (UK, Glasgow Caledonian University, School of Computing and Mathematical Sciences) (2004-2006)

Participant and speaker at: the Third International Congress on Industrial and Applied Mathematics – HAMBURG (Germany) - 1995. the First European Congress – PARIS (France) - 1992,

the International Congress of Mathematicians – ZURICH (Switzerland) - 1994,

BERLIN (Germany) - 1998,

BEIJING (China) - 2002.

The 14-th General Assembly of the International Mathematical Union

– SHANGHAI (China) - 2002.

GRANTS:

Long-term research grant of ISF (USA) (MXG200) – 1994–1996.

DFG (Deutscheforschungsgemeinschaft - Germany) grants: (1992-2005) (Je 166/1-2, We 659/16-3, 436 GEO 113/2/0, 436 GEO 17/2/95, 436 GEO 17/4/96, 436 GEO 17/2/97, FSB 404, 436 GEO 113/8/0-1).

DAAD (Germany) grant (1997)

NATO Collaborative Linkage grant (2001-2002) - NATO PST.CLG 976426/5437.

Grant of the London Mathematical Society – 1997.

Grant of the Royal Society – 2000-2001.

# FIELD OF RESEARCH:

Integral and Differential Equations of Mathematical Physics, Boundary Value and Initial Boundary Value Problems of Solid Mechanics, Direct and inverse problems of Mathematical Physics.

At present time I am investigating:

1) Problems of the steady state oscillation theory of anisotropic elastic bodies;

2) Regularity properties of solutions of the crack type problems for anisotropic elastic bodies;

3) Direct and inverse problems of mathematical physics, in particular, wave scattering problems;

4) Boundary variational inequalities: non-classical problems of mathematical physics and elasticity;

5) Reduction of three-dimensional problems to two-dimensional ones (Boundary value problems for cusped plates);

6) Boundary value problems for domains with non-compact (unbounded) rough boundaries and with non-smooth boundaries;

7) Boundary value and initial boundary value problems of the theory of hemitropic elasticity;

8) Boundary value and initial boundary value problems of the theory of thermoelectroelasticity.

# EDITORIAL BOARD of

- a) "Applied Mathematics, Informatics and Mechanics",
- b) "Memoirs on Differential Equations and Mathematical Physics",
- c) "Bulletin of TICMI"
- d) "Soros Educational Journal" (Tbilisi, Georgia).

**REFEREE** for

a) "Georgian Mathematical Journal".

REVIEWER for the American Mathematical Society Journal "Mathematical Reviews".

CURRENT PROFESSIONAL MEMBERSHIP:

Member of:

the American Mathematical Society,

the European Mathematical Society,

the International Society for the Interaction of the Mechanics and Mathematics,

the International Society for Boundary Elements.

the Academy of the Natural Sciences of Georgia.

International expert of the SOROS Scientific and Educational Foundation in Georgia. Chairman of the National Committee of the Georgian Mathematical Union.