

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

Professor, Doctor DAVID NATROSHVILI

PERMANENT ADDRESS:

Prof. D.Natroshvili
Georgian Technical University
Department of Mathematics (99)
77, M. Kostava st.
0175, Tbilisi
Republic of Georgia
E-mail: natrosh@hotmail.com
Fax: +995 (32) 942033

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

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 170 scientific papers, 5 monographs, and 6 text books. Supervisor of 12 PhD and 2 Doctor dissertations.

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, Mechanics,
Differential Equations, Boundary Element Methods and Potential Theory:**

CHEMNITZ (Germany) - 1983, 1988, 1993, 1999; 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 ETIENNE (France) - 2002, READING (UK) -

2004, AVEIRO (Portugal) - 2005, HIRSCHEGG (Austria) - 2006, Ankara (Turkey)-2007, Reading (UK) - 2007.

Participant and speaker at:

the Third and Sixth International Congresses on Industrial and Applied Mathematics –

HAMBURG (Germany) - 1995,

ZURICH (Switzerland) - 2007.

the First European Congress – PARIS (France) - 1992,

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

BERLIN (Germany) - 1998,

BEIJING (China) - 2002,

MADRID (Spain) - 2006.

The 14-th and 15-th General Assembly of the International Mathematical Union

– SHANGHAI (China) - 2002,

– SANTIAGO DE COMPOSTELA (Spain) - 2006.

Invited lectures:

Guest of the DFG (Deutscher Forschungsgemeinschaft - 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, 2005, 2006),

DARMSTADT (1992, 1994, 1996),

GÖTTINGEN (1994, 1998),

BERLIN (1994, 1995, 1996, 1997),

KARLSRUHE (2004),

POTSDAM (2004),

SAARBRÜCKEN (2005),

MÜNCHEN (2005).

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

Guest of the Manchester Metropolitan University (UK):

MANCHESTER (1998).

Guest of the Glasgow Caledonian University (UK):

GLASGOW (2004, 2006).

Guest of the Royal Society (UK):

BRUNEL university (Uxbridge), Universities of BATH and LEEDS (2000-2001),
BRUNEL university (Uxbridge) (2007).

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

Guest of the University of Athens (Greece): ATHENS (2001, 2004, 2006).

Guest of the Delaware University (USA) (CRDF&GRDF grant) - Newark (2007).

GRANTS:

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

DFG (Deutscher Forschungsgemeinschaft - 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.

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

Grant of the Royal Society (2005/R4-JP) – 2006-2008.

Grants of the Georgian National Science Foundation: GNSF/1.01.78(2005), GNSF/ST06/3-001 (2006-2007).

The U.S. Civilian Research and Development Foundation and the Georgian Research and Development Foundation (CRDF&GRDF) grant: No. GEP1-3339-TB-06, 2007 - 2009.

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 (piezoelectric materials).

EDITORIAL BOARD of international journals

- a) *“Memoirs on Differential Equations and Mathematical Physics”*,
- b) *“Applied Mathematics, Informatics and Mechanics”*,
- c) *“Mathematical Methods and Physicomechanical Fields”*,
- d) *“Bulletin of TICMI”*,
- e) *“Tbilisi Mathematical Journal”*,
- f) *“Advances in Mathematical Science Journal”* (AMSJ), Chief Editor.

REFEREE (REVIEWER) for international journals

- a) *“Georgian Mathematical Journal”*,
- b) *“Quarterly Journal of Mechanics and Applied Mathematics”*,
- c) *“International Journal of Mathematics and Mathematical Sciences”*,
- d) *“Mathematical Methods in the Applied Sciences”*,
- e) *“European Journal of Mechanics”*,
- f) *“Journal of Mathematical Analysis and Applications”*.

REVIEWER for the American Mathematical Society Journal:
“Mathematical Reviews”.

PROFESSIONAL ACTIVITY:

International expert of the SOROS *Scientific and Educational Foundation in Georgia* (1995-2005).

President of the *Georgian Mathematical Union* (1993-1998).

Chairman of the *National Committee of the Georgian Mathematical Union* (2001-2006).

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 International Scientific Committee of the TICMI (Tbilisi International Centre of Mathematics and Informatics)

the Academy of the Natural Sciences of Georgia.