

CURRICULUM VITAE

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Date of Birth: Nov. 10. 1935

Citizenship: Bulgaria

Marital Status: Married with two children

Education: M.Sc., Technical University of Civil Engineering, Sofia, 1959
Ph. D., Inst. of Fundamental Technological Research, Warsaw, 1967
D. Sci., Inst. of Mechanics, Sofia, 1958

Specializations:

1. Institute of Fundamental Technological Research (IFTR) - PAS, Warsaw, Poland - 4m, 1964
2. CISM, Udine, Italia - 1m, 1967
3. IFTR - PAS, Warsaw, Poland - 2m, 1966
4. Ecole Polytechnique, Paris, France - 6m, 1971

Professional Experience:

1. Research fellow, Inst. of Mechanics, Sofia, 1961 – 1973
2. Senior research fellow, Inst. of Mechanics, Sofia, 1973 – 1987
3. Vice dean of the Faculty of Mathematics and Mechanics, University of Sofia, 1974 – 1979
4. Scientific Secretary of the Institute of Mechanics and Biomechanics, Bulg. Academy of Sciences, Sofia, 1982 – 1989
5. Professor, Head of department, Inst. of Mechanics, Sofia, 1987 – 2004
6. Scientific secretary of the Bulgarian Academy of Sciences, 1996 – 2004
7. Rector of the Centre of Education – Bulgarian Academy of Sciences, 2004-2008
8. Correspondent Member of the BAS – 2004 –

Scientific Activities:

1. Researches in the field of Theoretical and Applied Mechanics. Mathematical Modelling, Computational Mechanics, Mechanics of Materials, Mechanics of Structures, Mechanics of processes.
2. Publications: Seven books (including two text books), about 210 scientific publications in scientific journals, series, proceeding etc.
3. Citations: about 260 citations in books, text books, doctoral thesis, scientific journals, proceedings published abroad and in Bulgaria.

4. Selected scientific and applied results:
 - (1) New theory for induced anisotropy in plastically deformable bodies and structures; New law for anisotropic hardening (with Acad. A. Sawczuk - IFTR-PAS, Warsaw, Poland); Establish of new event: induced anisotropy in polymers.
 - (2) General theory for material sensitive to the type of loading. Applications: for metals and alloys, polymers, woods, bricks, soils and rocks.
 - (3) New criterion for plastic localization in structural elements.
 - (4) Theory for determination of the safety conditions concerning different structures and loadings.
 - (5) New calculation method of the finite systems elaborates on the base on FDM with application in structural materials and structures with nonlinear properties under dynamic loading.
 - (6) Model for new structural materials, as intermetallics, nanomaterials, textile materials, different types of composites etc.
 - (7) Identification method for damages in existing reinforced concrete structures using dynamical approaches.
 - (8) Theoretical and experimental method for identification of constitutive relations in complicate cases using the netting experimental techniques.
5. Taking part in many scientific events abroad and in Bulgaria and presenting plenary lectures, invited lectures and regular presentations.

Pedagogical activities:

1. Governing pedagogical activities:
 - (1) Vice dean of the faculty of Mathematics and Mechanics, University, Sofia.
 - (2) Vice rector and rector of the Centre of Education - BAS.
 - (3) President of the Academic Counsel of the Centre of Education - BAS.
2. Lecture presentations:
 - (1) In VSU - Sofia: "Joint between architectural and engineering projects" (for the first time in Europe).
 - (2) In Chemical Technological and Metallurgical University (CTMU): "Mechanics of Nanomaterials" (for the first time in Europe).
 - (3) In University of Sofia, Faculty of Mathematics and Mechanics: "Mechanics of Solids" (for the first time in Bulgaria).
 - (4) In VSU - Sofia: "Theoretical Mechanics" (in English).
 - (5) In CTMU - Sofia: Modelling in nanosciences (for the first time in Bulgaria), (in English).
 - (6) In VSU - Sofia: "Statics, Kinematics, Dynamics" for civil engineering students.
 - (7) In New Bulgarian University: "Fracture Mechanics and Structural Safety States" (for the first time in Bulgaria).
 - (8) In TU - Sofia and in CTMU - Sofia: "Theories of elasticity and plasticity".
3. Invited professor:
 - (1) In "Ecole Superior de Mécanique et Aéronautique", Poitiers, France.
 - (2) In University of Perm, Russia.
 - (3) In University of Torino, Italia
 - (4) In IFTR - PAN, Warsaw, Poland,
4. Doctoral educations:
 - (1) 8 doctoral theses in the Institute of Mechanics - BAS (Two PhD doctors now are professors abroad and six ones are associated professors in IMech - BAS.
 - (2) One doctoral thesis in France, one in TU - Sofia and one in IM - BAS.

5. Text books:
 - (1) "Laboratory exercises in Mechanics" - for the University of Sofia
 - (2) "Mechanics of Materials" - for the CTMU - Sofia.
 - (3) "Mechanics of Nanomaterials" (in prepress), (in English)

Activities for engineering applications:

1. Head or participant of many projects for engineering applications in civil engineering, mechanical engineering, metallurgy projects, biomedical projects and so on.
2. Head of very large team of specialists for creating the norm in Bulgaria, for information applications in Mechanics, for modern doctoral studies etc. (for different ministries and for the BAS).

International scientific activities:

1. Head of the Bulgarian team in international projects according to the:
 - (1) Scientific program in Mechanics for the East countries.
 - (2) Scientific framework programs of the EC (IV, V, VI FPs)
 - (3) Scientific program of the NATO
2. Head and participant in bilateral international projects of the BAS and the scientific centres in Poland, Czech Republic, Russia, France, Germany, Italy, Belgium, Rumania etc. Currently, participation in the project of the International Consortium KMM-VIN (30 scientific centres from 15 countries).
3. Membership in Professional Societies:
 - (1) IUTAM (Member of the General Assembly)
 - (2) EUROMECH (correspondent)
 - (3) Computational Mechanics in Europe
 - (4) European Structural Integrity Society
4. Membership in the Advisory boards:
 - (1) Int. J. of Plasticity
 - (2) European J. of Mechanics/A
 - (3) Polish J. of Theor. and Appl. Mechanics
 - (4) Russian J. of Biomechanics
5. Participation in many international and national scientific events (Poland, France, Germany, Italy, England, Czech Republic, Brazil, Spain Denmark etc.)
6. Member of many Organizing Committees in many scientific conferences and abroad

Other Activities:

1. Member of many scientific councils (for mechanics, Dynamics, Strength and Reliability, Structural Mechanics - Head
2. Memberships in Scientific Technical and Mathematical -Mechanical Commissions in Ministry of Education and Sciences
3. Member of the Scientific Councils of the Institute of Mechanics, Institute of Metal Sciences and so on.
4. Member of the Commission for the Technical and Military Sciences in National Agency for Estimation and Accreditation.
5. Presentation of many reviews concerning different procedures for corresponding members of the BAS, professors, docents, doctors, doctors of sciences. Participation in

- nine Scientific Juries (after the new law in Bulgaria) for professors, docents, doctors of sciences.
6. Member of the High Testimonial Commission for Architecture, Civil Engineering and Geodesy (before the new law).
 7. Many reviews for scientific projects, books, and journal paper - abroad and in Bulgaria.
 8. Member of many editorial boards for proceedings, scientific series etc.
 9. Member of Governing team, General assembly, special commissions etc. in BAS.
 10. Member of Organizing Committees of many scientific events abroad and in Bulgaria.

Scientific Awards:

1. Order of Saints Cyril and Methodius - II degree (1985)
2. Gold badge for technical progress (1976)
3. Distinctive badge of the BAS (1977)
4. Medal “Marin Drinov” of the BAS (2004)
5. Honour member of the Institute of Mechanics - BAS (2010)

Corr. Member of the BAS

/ Anguel Baltov/