

CURRICULUM VITAE

IOAN SEBEȘAN, PH. D. ENGINEERING PROFESSOR

**TRANSPORTS FACULTY
“POLITEHNICA” UNIVERSITY OF BUCHAREST**

**DOCTORATE COORDINATOR IN TRANSPORT ENGINEERING
LAUREATE OF THE ROMANIAN ACADEMY**

**MEMBER OF THE TRANSPORT ACADEMY OF UKRAINA
SENATOR OF HONOUR OF „AUREL VLAICU” UNIVERSITY IN ARAD**

Nationality: Romanian

Telephone: office: 021.402.96.95, 021.402.95.10

Actual workplace: “Politehnica”University of Bucharest, Transports Faculty,
Departament Rolling Material of Railway
313, Splaiul Independenței, District 6, Bucharest

Workplace address:

Education and professional training:

- 1965 “Ion Neculce” High School, Bucharest
- 1970 “Politehnic”Institute of Bucharest,
Transports Faculty, department Rolling Material of Railway
- 1981 Ph Doctor with the thesis “ *The influence of the stick-slip phenomenon over diesel traction characteristics in alternative electricity* “ presented in the Politehnic Institute „Traian Vuia”, Timișoara

Title of qualification awarded: Ph Doctor Engineering Professor

Work Experience:

- 1970 – 1978 **Junior Lecturer** - “Politehnic” Institute of Bucharest, Transports Faculty, Departament Rolling Material of Railway
- 1978 – 1990 **Department Head** - Politehnic” Institute of Bucharest, Transports Faculty, Departament Rolling Material of Railway
- 1990 – 1992 **Lecturer** - “Politehnica”University of Bucharest, Transports Faculty, Departament Rolling Material of Railway
- 1992 – up to now **Professor** –“Politehnica”University of Bucharest, Transports Faculty, Departament Rolling Material of Railway
 - 1994 – up to now **Doctorate coordinator** in the engineering sciences field, doctorate in the Transport Engineering
- 1990 – 2012 **Head of Department in the Rolling Material of Railway**, - “Politehnica”University of Bucharest, Transports Faculty, Departament Rolling Material of Railway
 - 1990 – 2012 **Member of the senate in the POLITEHNICA University, Bucharest**
 - 2014 – up to now **Manager of the Railways Engineering Reasearch Centre**
 - 2015 – up to now **Member in the Board of Directors of METROREX S.A.**
- **2017 – up to now Member in the Board of Directors in CONSTANT DEVELOPMENT – Bucharest City Hall.**

I also mention other activities I have held since 1990:

- **Member of the Special Accreditation Comission in order to achieve the scientific titles of Ph. D, reference for the leading Ph D and endowment of IOSUD quality in the National Council of Certification of Ph Titles, Diplomas and Academical certificates (CNATDCU) of the Ministry of Education and Research**
- **ACPART Expert** (The National Agency for the Higher educational System and partnership with the Economic and Social)
- **Assessor Expert in the National Register of The Assessors in the Quality**

Assurance of the Higher Level Education Agency (ARACIS) – Engineering Sciences Commission

- **Member of the National Assessors Corpus – Engineering Field, The Ministry of National Education, Credits and Scholarships Agency**
- **Member of the Teaching Board Of the Transports Faculty, Politehnica University, Bucharest**
 - **Member of the Editorial Scientific College of UPB, Series D: Mechanic Engineering**
 - **Member of the Editorial College magazine: Mathematical Modelling in Civil Engineering, Technical University of Civil Engineering Bucharest**
 - **Member of the editorial office of the magazine: Synthesis of Theoretical and Applied Mechanics**
 - **President of the organisation in the Committee of the scientific event “The National Rolling Material Railways Symposium”, held annually.**
 - **President of the Doctorate Comissions** in the Transport Engineering filed of the Politehnica University in Bucharest, Transports Faculty: doctor and master admissions, exams and essays
 - **Member of the Doctorate Comissions** organised in the UPB University, as well as, in other universities around the country
 - **Coordinator of the Master programmes: “High speed railway vehicles” – “The Phenomenon of Interaction between the vehicle and the rolling track” and “The Engineering of Medium and the management of the quality in the railway field”**
- **President of the disertations/ diploma/ first degree Comissions** of the Rolling stock material of railways, Transports
 - **President of the Master admission Commission** in the Rolling material of railway department, Transports Faculty
 - **President in the Examination Commission of the Scientific Session Communication of the Students from the Rolling Material Railway department, Transports Faculty**
 - **Member of the High Speed Committee in the Transport Ministry**
 - **Member of the Integrated Transport Committee of the Transport Ministry**
 - **Member of the Board of Directors in METROREX Bucharest**

- **Member of the Board of Directors of the Transportation Research and Design Institute**
- **Member of the Board of Directors of SUDAREK from the Transport Ministry**
- **Assessor RELANSIN of the Scientific Research National Council**
- **Member of the The Romanian Association of Tribology (since 2012)**
- **Member of the Scientific Committee of the IXth National Symposium of the Railways with international participation , in 2010**
- **Member of the Board of INCAS Conferences** – National Institute for Aerospace Research Elie Carafoli

Awards and Distinctions:

- Laureate with **“Aurel Vlaicu” Award of the Romanian Academy**, for the Treaty “Dynamics of Railways Vehicles” in 1997
 - Member of the Transport Academy in Ukraina since 2010
- Awarded with the Title “Senator of Honour” of “Aurel Vlaicu” University, for the development of the higher education system in 2002
- Nominated **“Man of the Year”** by the American Biographical Institute, for the contribution brought to the development of science in 2001
 - Nominated **“Who’s Who”** by the International Biographical Centre, Cambridge, England in 2001
 - **Diploma of Excellency**, for the contribution to the Romanian literary and scientific heritage, Ed. Matrix Rom, Bucharest, 2013

Foreign Languages: French, English, Russian

15.10.2023

Appendix 1

Research and Teaching Career:

Being in High School , I was interested in the direction of fundamentals of science, mathematics and physics, and I was among the young olympics students at that disciplines, between 1962-1965.

During the Faculty (1965-1970) I wrote 7 scientific works in the range of rolling material presented at different scientific communication sessions for students and for professors too.

After graduating the studies, in 1970, as the best student I received and accepted the proposal to work at University. Until now, I have worked as professor at Rolling Material for railways Department, having all the didactic levels including university professor which I have since 1992

I obtained the title of Doctor at University „Traian Vuia” – Timisoara under direct coordination of professor Ioan Zaganescu, who is promoter of education in the range of Rolling Material for railways in Romania.

In my doctorate thesis I treated original problems related with stick-slip phenomenon at a steam engine.

Being a new idea for all over the world, my thesis and my studies related to stick-slip phenomenon, were appreciated in the gazettes of International Union of Railways from Paris, of Scientific Academy from Moscow and in well known scientific magazines.

Since 1990 until now, I am in the position of Head for Department of Rolling Material for Railway, at Transports Faculty and I am member of Professors Council. I am too member in the senate of Technical University from Bucharest.

From 1994 I was invested as doctorate coordinator in the field of transportations.

In my didactics career, I was official titular at almost all the mechanical disciplines, but I was especially oriented to „The Dynamics of Railway vehicles”, the most important discipline of the Rolling Materials for Railway specialization that is developed personally. I have supervised and coordinated the thesis in the railway field which led to **the creation of 25 doctorate thesis**

Appendix 2.

Published books (selection)

Ioan Sebeșan, *Tratat de dinamica vehiculelor feroviare*, Editura Academiei Române, ISBN 978-973-27-3219-9, București, 2020

Ioan Sebeșan, Camil Crăciun, Mihai Ștefan Sebeșan, *Analiza și modele de calcul ale sistemelor de izolare a șocurilor și vibrațiilor la vehiculele feroviare*, ISBN 978-606-25-0298-0, Editura Matrix Rom, București, 2016.

Ioan Sebeșan, Dan Băiașu, *Modele mecanice în dinamica vehiculelor feroviare*, Editura Academiei Române, 2014, ISBN 978-973-27-2443-9.

Ioan Sebeșan, *Dinamica vehiculelor de cale ferată*, Editura Tehnică, București, Ediția I - 1995, Ediția II - 1996, ISBN 973-31-0919-3. Lucrare distinsă cu **Premiul “Aurel Vlaicu” al Academiei Române** în anul 1997.

Ioan Sebeșan, *Proiectarea suspensiilor pentru vehicule pe șine*, Editura Tehnică, București, 1993, ISBN 973-31-0451-5.

Appendix 3. Scientific articles (selection)

● **Ioan Sebeșan**, Iulian Țurcanu, Conical rubber suspension springs in the construction of railway vehicles, IOP Conf. Series: Materials Science and Engineering, Vol. 564, 2019, Article number 012113.

●**Ioan Sebeșan**, Mircea Radu Sebeșan, Considerations on the V-block type shape suspension springs at the rail vehicles, IOP Conf. Series: Materials Science and Engineering, Vol. 564, 2019, Article number 012114.

●**Ioan Sebeșan**, Ion Manea, Marius Adrian Spiroiu, Sorin Arsene, Theoretical and experimental research on the phenomenon of stick-slip at traction railway vehicles, IOP Conference Series: Materials Science and Engineering, Volume 295, 2018 Code articol 012037 pp. 1-7

●**Ioan Sebeșan**, Sorin Arsene, Ion Manea, Construction of elastic wheels on light rail vehicles, MATEC Web of Conferences, Volume 178, 2018, Article number: 06006

●**Ioan Sebeșan**, Sorin Arsene, Ion Manea, Considerations on the use of elastic wheels to the urban transport vehicles, IOP Conference Series: Materials Science and Engineering, Volume 324, Issue 1, 6 April 2018, Code 135937, Article number 012018

Appendix 3. Scientific articles (selection)

●Ioan Sebeșan, Iulian Țurcanu, Conical rubber suspension springs in the construction of railway vehicles, IOP Conf. Series: Materials Science and Engineering, Vol. 564, 2019, Article number 012113.

●Ioan Sebeșan, Mircea Radu Sebeșan, Considerations on the V-block type shape suspension springs at the rail vehicles, IOP Conf. Series: Materials Science and Engineering, Vol. 564, 2019, Article number 012114.

●Ioan Sebeșan, Ion Manea, Marius Adrian Spiroiu, Sorin Arsene, Theoretical and experimental research on the phenomenon of stick-slip at traction railway vehicles, IOP Conference Series: Materials Science and Engineering, Volume 295, 2018 Code articol 012037 pp. 1-7

●Ioan Sebeșan, Sorin Arsene, Ion Manea, Construction of elastic wheels on light rail vehicles, MATEC Web of Conferences, Volume 178, 2018, Article number: 06006

●Ioan Sebeșan, Sorin Arsene, Ion Manea, Considerations on the use of elastic wheels to the urban transport vehicles, IOP Conference Series: Materials Science and Engineering, Volume 324, Issue 1, 6 April 2018, Code 135937, Article number 012018