

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,
Department Rolling Material of Railway

Workplace address: 313, Splaiul Independenței, District 6, Bucharest

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, Department Rolling Material of Railway
- 1978 – 1990 **Department Head** - Politehnic” Institute of Bucharest,
Transports Faculty, Department Rolling Material of Railway
- 1990 – 1992 **Lecturer** - “Politehnica” University of Bucharest,
Transports Faculty, Department Rolling Material of Railway
- 1992 – up to now **Professor** – “Politehnica” University of Bucharest, Transports
Faculty, Department 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 Academic 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 Comission**
- **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**
 - **Memeber 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 Poliethnica 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 disertation/ diploma/ first degree Comissions** of the Rolling stock material of railways, Transports
 - **President of the Master admission Comission** in the Rolling material of railway department, Transports Faculty
 - **President in the Examination Comission 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 Conseil. 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

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- 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.
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- 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