

**Lista de lucrări în domeniul de studii universitare de masterat
Ingineria și Managementul Factorilor de Mediu**

Numele și prenumele: Hrăniciuc Tomi Alexandrel

A. Teza de doctorat.

Institutie: Universitatea Tehnică "Gheorghe Asachi" din Iași, Facultatea de Hidrotehnică, Geodezie și Ingineria mediului

Perioada: 2007-2011

Indrumator: Prof. univ.dr.ing. Ion Giurma

Titlul tezei: Cercetări privind amenajarea complexă a bazinelor hidrografice pentru protecția împotriva inundațiilor

Titlul: Doctor în domeniul inginerie civilă, diplomă seria H, nr. 0005599, Ordin nr.6697 din 21.12.2011

B. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

C. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în țară, la edituri recunoscute CNCIS.

D. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local.

E. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

F. Lucrări științifice publicate în reviste cotate ISI sau indexate în baze de date internaționale

- reviste cotate ISI

1. Marcoie N ; Chihai S; **Hraniciuc TA**; Balan CD; Dragoi EN; Nechita MT, (2024), *Linking nutrient dynamics with urbanization degree and flood control reservoirs on the Bahlui river*, WATER, BASEL, SWITZERLAND, Mai, 2024, Vol. 16, Nr. 10, Art. 1322, eISSN 2073-4441, DOI 10.3390/w16101322, WOS: 001231476500001

2. Moldovan AC; **Hraniciuc TA**; Micle V; Marcoie N, (2023), *Research on the sustainable development of the Bistrita Ardeleana river in order to stop the erosion of the riverbanks and the thalweg*, SUSTAINABILITY, BASEL, SWITZERLAND, Apr. 2023, Vol. 15, Nr. 9, Art. 7431, eISSN 2071-1050, DOI 10.3390/su15097431, WOS:000987004200001

3. Moldovan AC ; Micle V ; **Hraniciuc TA**; Marcoie N, (2022), *Research on the sustainable development of the Bistrita Ardeleana river through the resizing of weirs*,

WATER, BASEL, SWITZERLAND, Oct. 2022, Vol. 14, Nr. 20, Art. 3333, eISSN 2073-4441, DOI 10.3390/w14203333, WOS:000873538800001

4. **Hraniciuc TA**; Marcoie N; Balan CD, (2021), *Determination of the flood defense embankment elevation crown, using advanced hydrodynamic modeling*, ENVIRONMENTAL ENGINEERING AND MANAGEMENT JOURNAL, Iasi, Romania, martie 2021, Vol 20, No. 3, pages:467-478, ISSN 1582-9596, DOI: 2-s2.0-85106595424, WOS:000637746900015;

5. Costel Boariu, Ioan Craciun, Catrinel-Raluca Giurma-Handley, **Tomi-Alexandrel Hraniciuc**, (2013) *Assesment of the impact of riverbed design on water wuality-the case study of Bahlui river*, Iasi, Romania, Environmental Engineering and Management Journal, Vol. 12(4), 625-635, ISSN 1582-9596 – 60 / 3, WOS:000323411700003;

6. **Tomi Hraniciuc**, Ilinca Dinu, Ioan Crăciun, (2013), *Determination of annual average turbidity in a river section using empiric relationships based on GIS techniques*, Environmental Engineering and Management Journal, Vol. 12(4), p.751-756, ISSN 1582-9596, WOS:000323411700020;

7. **T.Hraniciuc**, I.Craciun, I.Giurma, (2012) *Flood Mapping with Mike Flood Model for a Flood Event Reconstitution*, Journal of Environmental Protection and Ecology, 13(2), 756-763 – 60 / 3, WOS:000306252600038;

- în baze de date internaționale

8. N Marcoie, D Toacă, D Toma, V Boboc, **TA Hrăniciuc**, R Mitroi, (2023), *The impact of the embankment and the recreational lake on capturing front with drilling wells*, IOP Conference Series: Materials Science and Engineering, Conference Computational Civil Engineering CCE2023 24/05/2023 - 25/05/2023 Iasi, Romania, Vol. 1304, Nr. 1, pag. 012030, DOI 10.1088/1757-899X/1304/1/012030.

9. L Tătaru, **TA Hrăniciuc**, F Stătescu, N Marcoie, CM Vârlan, R Mitroi, (2023), *Hydrodynamic modelling and simulation of the variation of the water quality parameters of the Bahlui river*, IOP Conference Series: Materials Science and Engineering, Conference Computational Civil Engineering CCE2023 24/05/2023 - 25/05/2023 Iasi, Romania, Vol. 1304, Nr. 1, pag. 012032, DOI 10.1088/1757-899X/1304/1/012032.

10. Marcoie Nicolae, Toma Daniel, Boboc Valentin, **Hrăniciuc Tomi Alexandrel**, Balan Cătălin Dumitrel, (2023), *Hydroinformatics tools used to quantify the impact of urban expansion on water bodies, in the context of the intensification of extreme phenomena (Bacău urbanization case study)*, IOP Conference Series: Earth and Environmental Science, 14th International Conference on Hydroinformatics, HIC 2022, Bucuresti, Romania, 2023, Vol. 1136, Nr. 1, Art. 012015, ISSN 17551307, DOI 10.1088/1755-1315/1136/1/012015.

11. G. Dorin, C. Pricop, F. Stătescu, **T.A. Hrăniciuc** and D. Toma, (2022), *Mathematical modelling and numerical analysis of hydraulic system behaviour. A case study with application in HEC-RAS*, IOP Conference Series: Materials Science and

Engineering, Oradea, Romania, 7-8 iulie 2022, Vol. 1256, Conference Proceedings, , DOI 10.1088/1757-899X/1256/1/012027

12. Anca Dănilă, Ioan-Corneliu Marțincu, Clarisa Paraschivescu, Raluca Giurma-Handley, **Tomi-Alexandrel Hrăniciuc**, (2021), *Analysis of the optimal bridge piers number for reducing backwater levels*, Buletinul Institutului Politehnic Iasi, Sectia Chimie si Inginerie Chimica, 10 Aug. 2021, Vol. 67, Nr. 3.
13. **Tomi Alexandrel HRĂNICIUC**, Anca BĂLAN, (2016), *The use of advanced hydraulic tools to obtain flood hazard maps*, Lucrări științifice, seria Agronomie, USAMV Iași, Vol. 59, Nr. 2, ISSN 1454 – 7414.
14. Dinu I., **Hrăniciuc T.**, (2013), *Assessment of wastewater biosolids management options at regional level, using GIS techniques*, Lucrări științifice, seria Horticultură, USAMV Iași, ISSN 1454 – 7376.
15. **Hrăniciuc T.**, (2010), *Floodplain delineation*, Analele Universității „OVIDIUS” Constanta, XII, Seria Construcții, Vol. I, pp. 415 - 422, ISSN 1584 -5990.

G. Lucrări științifice publicate în reviste din străinătate.

H. Lucrări științifice publicate în reviste din țară, recunoscute CNCSIS.

I. Lucrări științifice publicate în volumele conferințelor.

1. Hugianu R.; Dima M.; Telisca M.; **Hraniciuc T.**, (2019), *Modern methods applied in remote sensing image fusion*, MODERN TECHNOLOGIES FOR THE 3RD MILLENNIUM, Oradea, ROMANIA , APR 04-05, 2019, Pages: 31-36 , EDITOGRAFICA S R L, INTL PROCEEDINGS DIV, VIA G VERDI 15, PIANORO, BOLOGNA 1-40065, ITALY, ISBN:978-88-87729-61-0.
2. Cucuteanu A.; **Hraniciuc T. A.**; Giurma-Handley R.; Cercel P.; Danila A., (2019), *Analysis of Floods and their Relation to Wetland Ecosystems*, MODERN TECHNOLOGIES FOR THE 3RD MILLENNIUM, Oradea, ROMANIA Date: APR 04-05, 2019, Pages: 149-154 , EDITOGRAFICA S R L, INTL PROCEEDINGS DIV, VIA G VERDI 15, PIANORO, BOLOGNA 1-40065, ITALY, ISBN:978-88-87729-61-0.
3. Danila A.; Giurma-Handley R.; **Hraniciuc T. A.**; Cercel P.; Cucuteanu A., (2019), *Generation of Flood Hazard Maps for Jijia River*, , MODERN TECHNOLOGIES FOR THE 3RD MILLENNIUM, Oradea, ROMANIA Date: APR 04-05, 2019, Pages: 155-160 , , EDITOGRAFICA S R L, INTL PROCEEDINGS DIV, VIA G VERDI 15, PIANORO, BOLOGNA 1-40065, ITALY, ISBN: 978-88-87729-61-0.
4. Danila A., Martincu I.C., GiurmaHandley R., **Hraniciuc T.A.**, (2019), *Impact assessment of bridge structure on the flood inundation in Ile-Bouchard, France*, 19th International Multidisciplinary Scientific Geoconference SGEM 2019, Bulgaria, Albena, 28 iunie-6 iulie , Water Resources, Forest, Marine and Ocean Ecosystems, Issue 3.1, Hydrology and Water Resources – Marine, volume 19, ISBN: 978-1-5108-8993-4/ISSN 1314-2704

5. **Tomi Alexandrel Hraniciuc**, Petru Cercel, (2018), *Reproduction of synthetic floods with different calculation probabilities using 1D hydraulic models*, 18th International Multidisciplinary Scientific Geoconference SGEM 2018, Bulgaria, Albena, 2-8 iulie, Hydrology and Water Resources CONFERENCE PROCEEDINGS VOLUME 18, ISSN 1314-2704, ISBN 978-619-7408-42-3.
6. Petru Cercel, **Tomi Alexandrel Hraniciuc**, (2018), *Consideration on the rehabilitation of small hydrotechnical facilities affected by climate changes and social antropogenic changes*, 18th International Multidisciplinary Scientific Geoconference SGEM 2018, Bulgaria, Albena, 2-8 iulie, Hydrology and Water Resources CONFERENCE PROCEEDINGS VOLUME 18, ISSN 1314-2704, ISBN 978-619-7408-42-3.
7. **Tomi Alexandrel Hraniciuc**, (2018), *Simulation of the occurrence of flood waves as a result of accidents recorded to earth dams*, THE NATIONAL TECHNICAL-SCIENTIFIC CONFERENCE (international participation) - the 17th edition - „MODERN TECHNOLOGIES FOR THE 3RD MILLENNIUM”, Oradea, Romania, 22-23 Martie, Vol. 17, ISBN 978-88-87729-49-8.
8. **Tomi Alexandrel Hraniciuc**, Petru Cercel, Costel Boariu, Constantin Bofu, (2017), *Creating flood hazard maps using 2D hydraulic models*, Proceedings of the 17th International Multidisciplinary Scientific Geoconference SGEM 2017, Albena, Bulgaria, Book -, Volume 17, pp. 173-181, ISBN 978-619-7408-04-1, ISSN 1314-2704.
9. **Tomi Alexandrel Hraniciuc**, Petru Cercel, Florin Trofin, Costel Boariu, Constantin Bofu, (2017), *Considerations on water storage lakes safety in case of extreme meteorological phenomena. Case study – Mileanca water storage lake*, Proceedings of the 17th International Multidisciplinary Scientific Geoconference SGEM 2017, Albena, Bulgaria, Book -, Volume 17, pp. 165-172, ISBN 978-619-7408-04-1, ISSN 1314-2704.
10. Costel Boariu, Constantin Bofu, Dana Madalina Pohrib, Petru Cercel, **Tomi Hraniciuc**, (2017), *Ice jam mitigation on Bistrita river through hydraulic control structures*, Proceedings of the 17th International Multidisciplinary Scientific Geoconference SGEM 2017, Albena, Bulgaria, Book -, Volume 17, pp. 393-401, ISBN 978-619-7408-04-1, ISSN 1314-2704.
11. Constantin Bofu, Costel Boariu, Iulian Hogas, Petru Cercel, **Tomi Hraniciuc**, (2017), *Monitoring rare plant species, located in protected areas, with GIS throughout technology*, Proceedings of the 17th International Multidisciplinary Scientific Geoconference SGEM 2017, Albena, Bulgaria, Book -, Volume 17, pp. 603-618, ISBN 978-619-7408-03-4, ISSN 1314-2704.
12. **Tomi Alexandrel Hraniciuc**, Petru Cercel, (2016), *Coupled hydrological and hydraulic modeling of dangerous meteorological phenomena*, Proceedings of the 16th International Multidisciplinary Scientific Geoconference SGEM 2016, Albena, Bulgaria, Book 3, Volume I, pp. 211-218, ISBN 978-619-7105-61-2, ISSN 1314-2704.

13. **Tomi Alexandrel Hrăniciuc**, Costel Boariu, Constantin Bofu, (2016), *Calibration of minor bed rivers hydraulic parameters using modern software*, Proceedings of the 16th International Multidisciplinary Scientific Geoconference SGEM 2016, Albena, Bulgaria, Book 3, Volume I, pp. 105-112, ISBN 978-619-7105-61-2, ISSN 1314-2704.

14. Cercel Petru, **Hrăniciuc Tomi**, (2016), *Evaluation of an earth dam functioning, in case of registration of floods larger than those for which it was designed*, Proceedings of the 16th International Multidisciplinary Scientific Geoconference SGEM 2016, Albena, Bulgaria, Book 3, Volume I, pp. 305-312, ISBN 978-619-7105-61-2, ISSN 1314-2704.

15. Giurma I., **Hrăniciuc T.**, Cercel P., (2009), *Flood monitoring through hydrological and hydraulic parameters modeling using modern software*, Proceedings of the 6th International Conference on the Management of Technological Changes, September 3-5, Alexandroupolis, Greece, Book 1, pp. 629 - 632, ISBN 978-960-89832-6-7, ISBN (Vol. 1) 978-960-89832-7-4, WOS:000273225100158.

J. Invenții.

J1. Dosare depuse la OSIM

J1.1. **Tomi Alexandrel Hrăniciuc**, Constantin-Marin Antohi, Marius Telișcă “Instalație limnimetrică autonomă multifuncțională”, Dosar A00347/22.06.2020.

J1.2. Sârbu Gabriel Constantin, Antohi Constantin Marin, Daniel Toma, **Hrăniciuc Tomi Alexandrel**, “Batimetru cu sondă hidrostatică”, Dosar A 00345/22.06.2020.

J1.3. Marius Telișcă, Constantin-Marin Antohi, **Tomi Alexandrel Hrăniciuc** “Instalație de avertizare la construcțiile hidrotehnice aflate în exploatare”, Dosar A00346/22.06.2020 .

J2.Brevete primite

K. Contracte de cercetare.

K1.Director de grant (Responsabil UTIasi)

K2.Membru în colectiv

1. „ENERGYDAM – Energy generation from Non-Powered Dams” - 20x346958x4.835/10000/12
2. CNFIS-FDI 354/21- 15x433276/10000/24
3. CNFIS-FDI 460/22- 15x424600/10000/35
4. *Science4Future-II Consortium Agreement for Horizon Europe*, 17276/26.05.2022 – 20x44450 Ex4,946/10000/12

5. Sistem Energetic Inteligent in arii protejate/ acronim SEI - finantat prin Mecanismul Financiar al Spatiului Economic European (SEE) 2009-2014. Membru in echipa de cercetare pentru TUIASI 15 x 1520863/10000 / 10 membri echipa=228 p (cota TUIASI 345000 euro x 4.4083=1520863 lei)

6. Innovative techniques for protection against disasters caused by climatic changes, Director- PhD.MSc.Eng.Prof.I. Giurma, Members- PhD.MSc.Eng.Prof C-tin Antohi, PhD.MSc.Eng. Assist. Prof. I. Crăciun, PhD.MSc.Eng. Inf. Assist. Prof. RC. Giurma-Handley, PhD.Stud.MSc.Eng.M.Telișcă, PhD.Stud.MSc.Eng. **T.Hrăniciuc**, PhD.Stud.Msc.Eng.M.Arhip, Financed by the National Council of Scientific Research from Higher Enseignement.

Contracte Internationale

K3.Contracte de cercetare încheiate cu companii, regii, societati comerciale (responsabil sau membru în colectivul de cercetare)

1. Hrăniciuc Tomi-**director contract**, Marcoie Nicolae, „STUDIU DE REMUU PE RAUL BISTRITA, AMONTE DE LACUL DE ACUMULARE BACAU, JUD. BACAU”,contract de cercetare cu societate comerciala SC DEDEMAN SRL, nr. 3229/25.03.2021, val:15000 lei fara TVA (10x15000/10000=15)

2. Hrăniciuc Tomi-**director contract**, Boariu Costel, Dan Pădure, Teodoru Bogdan, Cercel Petru, “Studiu albie pârau Călnău în zona podului de pe DJ 220, km 60+500, comuna Pardoși, județul Buzău” cadrul contractului de cercetare/finanțare tip agent economic, nr. 18330/26.08, 2019, val=47600 RON (10x 47600/10000=47,6)

3. Boariu Costel, **Hrăniciuc Tomi**, Bofu Constantin, Hogas Horațiu, Pădure Dan, Studiu privind analiza raporturilor hidraulice între râul Bistrița și zona din amonte de coada lacului Izvorul Muntelui și propuneri de îmbunătățiri, structurale și nestructurale, privind exploatarea râului Bistrita și a infrastructurilor existente, în perioada fenomenelor de iarnă, pe sectorul studiat ; Beneficiar ABA Siret Bacau 10x59500/10000/5, 2013.

K4.Activitate de expertizare

L. Premii, distincții.

M.Alte realizări semnificative.

Elaborare standarde

M1. „Ghid pentru proiectarea si executia lucrarilor de aparare/protejare a taluzurilor la canale si diguri, indicativ GE-027-2022” -30

M.2. ”Normativ pentru verificarea calitatii si receptia lucrarilor de constructii si instalatii aferente, indicativ C 56-2023, Caietul VI Lucrari de regularizare si indiguire pentru irigatii” - 30

Data,
01.06.2025

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