

## Curriculum vitae



### Informații personale

Nume / Prenume **ONICA, ILIE**  
Adresă [redacted]  
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E-mail onicai2004@yahoo.com  
Naționalitate română  
Data nașterii 07.07.1956  
Sex masculin

### Locul de muncă / Domeniul ocupațional

Funcția sau postul ocupat **Universitatea din Petroșani / Cadru didactic**  
Activități și responsabilități principale Cadru didactic  
Numele și adresa angajatorului Universitatea din Petroșani, No.20, Str. Universității, Petroșani, România

### Experiența profesională

1982-1984: inginer stagiar - I. M. Lonea;  
1984-1985: inginer cercetător - I.C.P.M.C. Petroșani;  
1985-1990: asistent universitar - Universitatea din Petroșani;  
1990-1996: șef de lucrări - Universitatea din Petroșani;  
1996-2001: conferențiar universitar - Universitatea din Petroșani;  
2001-prezent: profesor universitar - Universitatea din Petroșani, Facultatea de Mine, Departamentul de Inginerie Minieră, Topografie și Construcții.  
2016 – prezent, coordonator de doctorat în domeniul Mine, Petrol și Gaze

### Educație și formare

Perioada 11.08.2016  
Calificarea / diploma obținută Teza de abilitare în Mine, Petrol și Gaze  
Numele și tipul instituției de învățământ / furnizorului de formare Universitatea din Petroșani

Perioada 01.1990 -06.1995  
Calificarea / diploma obținută Diplomă de doctor inginer în ramura de știință „Tehnică”  
Numele și tipul instituției de învățământ / furnizorului de formare Universitatea din Petroșani

Perioada 09.1990-11.1991  
Calificarea / diploma obținută Masterat / Diplôme d'étude approfondies (Master of Ph.) de „Génie Civil et Minier”  
Numele și tipul instituției de învățământ / furnizorului de formare L'Institut National Polytechnique de Lorraine Nancy, Republique Française

Perioada 09.1977 - 06.1982  
Calificarea / diploma obținută Diplomă de inginer, Profilul Mine, Specializarea Mine

Numele și tipul instituției de învățământ / furnizorului de formare	Institutul de Mine (Universitatea) din Petroani – Facultatea de Mine
Numele și tipul instituției de învățământ / furnizorului de formare	Politecnico di Torino, Italy, Dipartimento del Territorio, dell'Ambiente e delle Geotecnologie
Perioada	01.05.1998 - 01.08.1998
Calificarea / diploma obținută	Stagiul de documentare în domeniile: „Impactul tehnologiilor miniere asupra mediului” și „Reutilizarea excavărilor miniere subterane”
Aptitudini și competențe personale	
Limbile străine cunoscute	
Autoevaluare	
Nivel european (*)	
Limba	
Limba	
Limba	
Competențe și aptitudini profesionale și științifice	<p>Domenii de competențe:</p> <p>Exploatarea zăcămintelor de carbuni de minereuri;  Ingineria rocilor cu aplicații în minerit;  Modelarea numerică a fenomenelor geomecanice miniere;  Mecanizarea tehnologiilor de extragere a substanțelor minerale utile și a tehnologiilor de execuție a lucrărilor miniere subterane.</p>
Informații suplimentare	<p>Membri în asociații profesionale și științifice:</p> <p>Asociația Generală a Inginerilor din România (AGIR);  Societatea Română de Geotehnic și Fundații (SRGF);  Comitetul Național Român al Consiliului Mondial al Energiei (CNR-CME);  Societatea Internațională a Profesorilor de Exploatare și Miniere (SOMP);  Societatea Internațională de Mecanica Solului și Inginerie Geotehnică (ISSMGE).</p>

În alegere				Vorbire				Scriere	
Ascultare		Citire		Participare la conversație		Discurs oral		Exprimare scris	
C2	francez	C2	francez	C2	francez	C2	francez	C2	francez
B1	englez	C1	englez	B1	englez	B1	englez	C1	englez
C1	italian	B2	italian	B1	italian	A2	italian	A1	italian

(\*) [Nivelul Cadrului European Comun de Referință Pentru Limbi Străine](#)

## LISTA LUCRĂRILOR SEMNIFICATIVE ELABORATE

- TEZE (total 3):

ONICA, I., Studiul stabilității galeriilor dreptunghiulare scufundate în medii stratificate. Aplicație la minele de huii din Provence / Etude de la stabilité de toit des galeries quadrangulaires creusées dans des milieux stratifiés. Application aux houillères de Provence, L'Institut National Polytechnique de Lorraine Nancy, France, Masterat științific în Geniu civil și minier / Diplôme d'étude approfondies de „Génie Civil et Minier” 1991.

ONICA, I., Contribuția la perfecționarea tehnologiilor de exploatare cu fronturi lungi de abataj a straturilor groase de carbune din Valea Jiului, prin utilizarea unor susineri mecanizate adecvate condițiilor geominier, Teză de doctorat, Universitatea din Petroani, 1995.

ONICA, I., Contribuția la modelarea și analiza stabilității terenurilor aflate sub influența excavărilor miniere subterane și perfecționarea sistemelor de exploatare a zăcămintelor de substanțe minerale utile, Teză de abilitare - Domeniul Mine, Petrol și Gaze, Universitatea din Petroani, 2016.

- C R I (total 9):

ONICA, I., Introducere în modelarea cu elemente finite. Stabilitatea excavărilor miniere, Ed. Universitas, Petroani, 2016, ISBN 978-973-741-509-7.

ONICA, I., Hidrodinamica mediilor poroase. Fundamente teoretice, Ed. Universitas, Petroani, 2016, ISBN 978-973-741-503-5.

ONICA, I., Exploatare miniere, Ed. Universitas, Petroani, 2016, ISBN 978-973-741-471-7.

ONICA, I., MARIAN, D.P., Aplicații ale metodei elementelor finite în analiza stabilității terenurilor și structurilor subterane, Ed. Universitas, Petroani, 2016, ISBN 978-973-741-473-1.

ONICA, I., Stabilitatea excavărilor miniere subterane executate în medii stratificate, Editura Universitas, Petroani, 2006, ISBN (10) 973-8260-89-2; ISBN 978-973-8260-898-4.

ONICA, I., CHIRIL, G., Exploatarea cu banc subminat în abataje frontale Editura AGIR, București, 2005, ISBN 973-720-022-5.

ONICA, I., Impactul exploatareii zăcămintelor de substanțe minerale utile asupra mediului, Editura Universitas, Petroani, 2001, ISBN 973-8260-15-9.

ONICA, I., Introducere în metode numerice utilizate în analiza stabilității excavărilor miniere, Editura Universitas, Petroani, 2001, ISBN 973-8260-16-7.

POPA,A., ILIA ,N., GRUNEAN U,I., ONICA,I.,RADU,S., Metode i tehnologii de exploatare a z c mintelor de substan e minerale utile, Editura Didactic i Pedagogic , Bucure ti, 1996, ISBN 973-30-4898-4.

- PUBLICA II (total 180):

Onica,I. et.al., Economical Optimization of the Longwall Faces with Top Coal Caving Mining, in Horizontal Slices, Archives of Mining Sciences, Vol.61(2012), No.3, p.651-676, DOI: 10.1515/amsc-2016-0046.

Mihu ,S., Marian D.P., Onica I., Cozma E., Reducing Environmental Impact Generated by the Extraction of Rock Salt in Solution at the Ocnele Mari, Romania, Proceeding of the 15<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2015, ISSN: 1314-2704, <http://www.sgem.org/sgemlib/spip.php?article5518&lang=en>

Mihu ,S., Marian D.P., Cozma E., Onica I., Stability Analysis of the Underground Structures from the Ocnele Mari Saline, Proceeding of the 15<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2015, ISSN: 1314-2704, <http://www.sgem.org/sgemlib/spip.php?article5525&lang=en>

Floarea D., Marian D.P., Onica I., Cozma E., Necessity of Following up the Land Surface Deformation For Closed Mining Areas, Proceeding of the 15<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2015, ISSN: 1314-2704, <http://www.sgem.org/sgemlib/spip.php?article6491&lang=en>

Mihu ,S., Marian,D.P., Onica,I., Cozma,E. Reducing Environmental Impact Generated by the Extraction of Rock Salt in Solution at the Ocnele Mari, Romania, Proceeding of the 15<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2015, Sofia, Bulgaria, June 16-25 2015, Book1 Vol. 3, 543-550 pp ISSN: 1314-2704; DOI: 10.5593/SGEM2015/B13/S3.071, <http://www.sgem.org/sgemlib/spip.php?article5518&lang=en>

Mihu ,S., Marian,D.P., Cozma,E., Onica,I. Stability Analysis of the Underground Structures from the Ocnele Mari Saline, Proceeding of the 15<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2015, Sofia, Bulgaria, June 16-25 2015, Book1 Vol. 3, 595-602 pp, ISSN: 1314-2704, DOI:10.5593/SGEM2015/B13/S3.078, <http://www.sgem.org/sgemlib/spip.php?article5525&lang=en>

Floarea, D., Marian, D.P., Onica, I., Cozma, E. Necessity of Following up the Land Surface Deformation For Closed Mining Areas, Proceeding of the 15<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2015, Sofia, Bulgaria, June 16-25 2015, Book5 Vol. 2, 733-738 pp, ISSN: 1314-2704. DOI: 10.5593/SGEM2015/B52/S23.097 , <http://www.sgem.org/sgemlib/spip.php?article6491&lang=en>

Onica,I., Cozma,E., Marian,D.P., tefan,N. Prognosis of the Maximum Subsidence and Desplacement of the Ground Surface in the Jiu Valley Coal Basin Conditions, 14<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO SGEM 2014 Modern Management of Mine Producing, Geology and Environmental Protection, 17 – 23 June, 2014, Bulgaria. ISBN 978-619-7105-09-4 / ISSN 1314-2704, June 19-25, 2014, Vol. 3, 465-472 pp. DOI: 10.5593/SGEM2014/B13/S3.061. (<http://sgem.org/sgemlib/spip.php?article3925>).

Lupuleac,R.F., Cozma,E., Onica,I. Considerations on the Hard Coal Mining Reorganization In Jiu Valley Since 1990, 14<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO SGEM 2014 Modern Management of Mine Producing, Geology and Environmental Protection, 17 – 23 June, 2014, Bulgaria. ISBN 978-619-7105-09-4 / ISSN 1314-2704, June 19-25, 2014, Vol. 3, 155-162pp. DOI: 10.5593/SGEM2014/B13/S3.021. (<http://sgem.org/sgemlib/spip.php?article3885>).

Onica, I., Cozma, E., Mih ilescu,V. Technical and Economic Optimization of the Parameters of the Top Coal Caving Mining Method in the Jiu Valley Basin, Proceeding of the 13<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2013 Sofia, Bulgaria, June 16-22 2013, pag. 749-756; Published by STEF92 Technology Ltd., 14 Kl. Ohrdiski Blvd., Sofia, ISBN 978-954-91818-7-6, ISSN 1314-2704; DOI:10.5593/SGEM2013/BA1.V1/S03.070: (<http://sgem.org/sgemlib/spip.php?article2662>).

One ,D., Semen,C., Cozma,E.,Onica,I. Protection of the Underground Mining Structures Against the Rock Blasting Effects in the Case of Rosia Poieni Open Pit, Proceeding of the 13<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2013 Sofia, Bulgaria, June 16-22 2013, pag. 625-632; Published by STEF92 Technology Ltd., 14 Kl. Ohrdiski Blvd., Sofia, ISBN 978-954-91818-7-6, ISSN 1314-2704; DOI:10.5593/SGEM2013/BA1.V1/S03.053: (<http://sgem.org/sgemlib/spip.php?article2645>).

Onica,I., Cozma,E. Finite Element Method Analysis of the Crown Pillar Stability in the Case of the Rosia Poieni Copper Deposit, Proceeding of the 13<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2013 Sofia, Bulgaria, June 16-22 2013, pag. 477-484; Published by STEF92 Technology Ltd., 14 Kl. Ohrdiski Blvd., Sofia, ISBN 978-954-91818-7-6, ISSN 1314-2704; DOI:10.5593/SGEM2013/BA1.V1/S03.034; (<http://sgem.org/sgemlib/spip.php?article2626>).

Onica,I., Marian,D. Ground Surface Subsidence as Effect of Underground Mining of the Thick Coal Seams in the Jiu Valley Bassin, Archives of Mining Sciences, Vol.57(2012), No.3, p.547-577, DOI: 10.2478/v10267-012-0036-z. ([http://mining.archives.pl/index.php/component?option=com\\_remository/Itemid,0/func,select/id,76/orderby,2/page,2/lang,en/](http://mining.archives.pl/index.php/component?option=com_remository/Itemid,0/func,select/id,76/orderby,2/page,2/lang,en/))

Onica,I., Cozma.E., Mih ilescu,V. Improvement of economic efficiency of longwall mining, in short panels, in the case of Jiu Valley thick coal seams, Proceeding of the 11<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2011, Sofia, Bulgaria, June 19-25 Vol.I, Section "Exploration and Mining", 2011, pag. 801-808; Published by STEF92 Technology Ltd., 14 Kl. Ohrdiski Blvd., Sofia, Bulgaria ISSN 1314-2704; DOI: 10.5593/sgem2011/s03.120, (<http://sgem.org/sgemlib/spip.php?article110>).

Onica, I., Cozma, E., One ,D. Considerations on the mining evolution of Ro ia Poieni copper deposit, Proceeding of the 11<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2011, Sofia, Bulgaria, June 19-25.06., Vol.I, Section "Exploration and Mining", 2011, pag.743-750; Published by STEF92 Technology Ltd., 14 Kl. Ohrdiski Blvd., Sofia, Bulgaria ISSN 1314-2704; DOI: 10.5593/sgem2011/s03.112; (<http://sgem.org/sgemlib/spip.php?article102>).

Onica, I., Cozma, E., Marian, D.P. Analysis of the Ground Surface Subsidence in the Jiu Valley Coal Basin by using the Finite Element Method, Proceeding of the 11<sup>th</sup> International Multidisciplinary Scientific Geo-Conference & EXPO - SGEM 2011, Sofia, Bulgaria, June 19-25.06. Vol.I, Section "Exploration and Mining", 2011, pag.685-692, Published by STEF92 Technology Ltd., 14 Kl. Ohrdiski Blvd., Sofia, Bulgaria ISSN 1314-2704; DOI: 10.5593/sgem2011/s03.104; (<http://sgem.org/sgemlib/spip.php?article94&lang=en>).

Arad,S., Arad,V., Onica,I., Oprina,A., Chipe iu,F., Mitric ,B., Apostu,A., Margineanu,R. Stability Study for a Large Cavern in Salt Rock from Sl nic Prahova, Acta Physica Polonica, B., No.7, Vol.41/2010, pag.1791-1801. <http://www.actaphys.uj.edu.pl/old/vol41/pdf/v41p1789.pdf>.

Marian D.P., Onica I., Cozma E., Mihu S. SOCON Cavern's Stability Analysis by using Finite Element Numerical Modelling, Annals of the University of Petro ani – Mining Engineering , Vol. 15 (2014), ISSN: 1454-9174, pag.73. (revist categoria B+, cod CNC SIS 22; MKPERIODICA - Rusia, ULRICH'S - Germania i EBSCO Publishing Inc. – SUA; SUWECO – Cehia) [http://www.ulrichsweb.com/ulrichsweb/ulrichsweb\\_news/ulrichslb3u.asp](http://www.ulrichsweb.com/ulrichsweb/ulrichsweb_news/ulrichslb3u.asp).

Floarea D., Onica I., Cozma E., Marian D.P. Necessity of Subsidence Phenomenon Monitoring in the case of Sustainable Development of Jiu Valley Coal Basin Conditions, Annals of the University of Petro ani – Mining Engineering , Vol. 15 (2014), ISSN: 1454-9174, pag.65. (revist categoria B+, cod CNC SIS 22; MKPERIODICA - Rusia, ULRICH'S - Germania i EBSCO Publishing Inc. – SUA; SUWECO – Cehia) [http://www.ulrichsweb.com/ulrichsweb/ulrichsweb\\_news/ulrichslb3u.asp](http://www.ulrichsweb.com/ulrichsweb/ulrichsweb_news/ulrichslb3u.asp).

Onica,I. Cozma,E. Analysis of mechanized mining technologies for the Romanian rock salt deposits, Annals of the University of Petro ani – Mining Engineering Vol. 15 (2014), ISSN: 1454-9174, pag.29. [http://www.ulrichsweb.com/ulrichsweb/ulrichsweb\\_news/ulrichslb3u.asp](http://www.ulrichsweb.com/ulrichsweb/ulrichsweb_news/ulrichslb3u.asp).

Onica,I., Cozma,E. Stability analysis of the Praid Saline strength structures in the conditions of the roadheaders rocks salt cutting, Mining Revue, Vol.20, No. 3/2014, pag. 15-22, ISSN-L 1220-2053/ISSN 2247-8590, <http://www.ebscohost.com/titleList/a9h-journals.pdf>.

Onica, I., Cozma,E., Rusu,A. Stability Analysis of the Settling Underground Reservoir - Hydroelectric Arrangement of the Jiu River, Annals of the University of Petro ani, Mining Engineering, Vol.13 (XXXX), 2012, pag.78-89, (<http://upet.ro/anale/mine/pdf/Annals-Mining-Engineering-2012.pdf>)

Onica,I., Cozma,E., One ,D. Assessment of the Safety Factor of the Crown Pillar Between Open Pit and Underground Mining in the Case of the Ro ia Poieni Copper Deposit, Annals of the University of Petro ani, Mining Engineering, Vol.13 (XXXX), 2012, pag.63-77, (<http://upet.ro/anale/mine/pdf/Annals-Mining-Engineering-2012.pdf>).

Onica,I., Cozma,E., Marian,D. Roadheaders Selection for the Technical and Geo-Mining Conditions of the Romanian Salt Mines, Annals of the University of Petro ani, Mining Engineering, Vol.13 (XXXX), 2012, pag.42-50, (revist categoria B+, cod CNC SIS 22; MKPERIODICA - Rusia, ULRICH'S - Germania i EBSCO Publishing Inc. – SUA; SUWECO – Cehia) (<http://upet.ro/anale/mine/pdf/Annals-Mining-Engineering-2012.pdf>).

One ,V.D., Onica,I., Cozma,E. Mining Parameters Determination in the Case of the Open Pit and Underground Mining of the Ro ia Poieni Copper Deposit, Annals of the University of Petro ani, Mining Engineering, Vol.13 (XXXX), 2012, pag.35-41, (<http://upet.ro/anale/mine/pdf/Annals-Mining-Engineering-2012.pdf>).

Onica,I., Cozma,E., Marica,D. Stability Analysis of the Rock Salt Rooms and Pillars of the Ocele Mari Saline with the Aid of the 2D Finite Element Modelling, Annals of the University of Petro ani, Mining Engineering, Vol.12 (XXXIX), 2011, pag.7-17 (<http://upet.ro/anale/mine/pdf/Annals-Mining-Engineering-2011.pdf>).

Marian,D.P., Onica,I., Cozma,E. 2D and 3D Finite Element Modelling of the Jiu Valley Subsidence Phenomenon, Annals of the University of Petro ani, Mining Engineering, Vol.12 (XXXIX), 2011, pag.18-31, (<http://upet.ro/anale/mine/pdf/Annals-Mining-Engineering-2011.pdf>).

Marian, D.P., Onica, I., Cozma, E. New profile function for ground subsidence assessment in the case of underground coal mining, Revista Minelor Vol. 17, Nr. 4/2011, pag.24-33, , revist categoria B+, cod CNC SIS 293, ISSN-L 1220-2053 / ISSN 2247-8590; BDI: EBSCO Publishing Inc. - SUA; ([www.upet.ro/revista/revistaminelor.html](http://www.upet.ro/revista/revistaminelor.html)).

Onica,I., Semen,C., Cozma,E., Rusu,A. Support Structure Stability Analysis of the Valve House of the Bottom Discharge, R stoli a Dam, Annals of the University of Petro ani, Mining Engineering, Vol.XI, 2010, pag. 116-126, (<http://upet.ro/anale/mine/pdf/Annals-Mining-Engineering-2010.pdf>).

Onica,I., Semen,C., Cozma,E., Rusu,A. Stability Analysis On The Stages of the Underground Large Excavations With the Aid of Axial-Symmetry Finite Elements, Revista Minelor No.7, 2010, , revist categoria B+, cod CNC SIS 293, ISSN-L 1220 -2053/ISSN 2247-8590; BDI: EBSCO Publishing Inc. - SUA; ([www.upet.ro/revista/revistaminelor.html](http://www.upet.ro/revista/revistaminelor.html)).

Onica,I., Cozma,E. Kinetostatic Analysis of Tiered Powered Supports In Longwall Mining Faces, Vol.16, Revista Minelor Nr.4 /2010, pag.12-15, , revist categoria B+, cod CNC SIS 293, ISSN-L 1220-2053/ISSN 2247-8590; BDI: EBSCO Publishing Inc. - SUA; ([www.upet.ro/revista/revistaminelor.html](http://www.upet.ro/revista/revistaminelor.html)).

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Cozma,E. Onica,I., Hirian,C. Stability analysis of the bell-shape room (Turda saline), Revista Minelor, Vol.15, Nr.9/2009, pag.11-14, , revist categoria B+, cod CNC SIS 293, ISSN-L 1220-2053/ISSN 2247-8590; BDI: EBSCO Publishing Inc. - SUA; ([www.upet.ro/revista/revistaminelor.html](http://www.upet.ro/revista/revistaminelor.html)).

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