

Titlu proiect complex: **Tehnologii noi de diagnoza si tratament pentru conservarea si revitalizarea componentelor arheologice ale patrimoniului cultural national**

Titlul proiect component **Pr. 3 ICF: Materiale tradiționale și avansate utilizate pentru protejarea componentelor arhitecturale ale patrimoniului cultural**

Categoria de proiect: Proiecte complexe realizate în consorții

Contractul de finanțare: 51PCCDI/2018 (nr. aplicatiei: PN-III-P1-1.2-PCCDI2017-0476)

Manager proiect: Dr. ing. Luminita Predoană

Lista rezultate finale 2018-2021

Nr. crt.	NUME AUTORI	TITLUL ARTICOLULUI / CĂRȚII / COMUNICĂRII ȘTIINȚIFICE	REVISTA / VOLUMUL/EDITURA IN CARE A APARUT / CONFERINTA LA CARE S-A COMUNICAT	ANUL PUBLICĂRII/ COMUNICĂRII
ARTICOLE ISI				
1	Victor Fruth, Ligia Todan, Cosmin Iulian Codrea, Iuliana Poenaru, Simona Petrescu, Ludmila Aricov, Madalina Ciobanu, Luiza Jecu, Rodica Mariana Ion, Luminita Predoana	Multifunctional Composite Coatings Based on Photoactive Metal-Oxide Nanopowders (MgO/TiO ₂) in Hydrophobic Polymer Matrix for Stone Heritage Conservation	Nanomaterials, 2021, 11 (10), 2586	2021
2	Dana Gingasu, Ioana Mindru, Daniela C. Culita, Luminița Predoana, Gabriela Petcu, Madalina Ciobanu, Silviu Preda, Jeanina Pandelescu, Simona Petrescu	MgO obtained by chemical and green synthesis methods and applied in photocatalytic degradation of methyl orange	Rev. Roum. Chim., 2021, 66(5), DOI: 10.33224/rch.2021.66.5.10	2021
3	Rodica-Mariana Ion, Claudiu Eduard Rizescu, Dan Adrian Vasile, Gabriel Vasilevici, Irina Atkinson, Adriana Rusu, Luminita Predoana, Florin Miculescu	Layered Double Hydroxides (LDHs) as New Consolidants for Cultural Heritage Masonry.	Crystals 2022, 12, 490. https://doi.org/10.3390/cryst12040490	2022
4	Jeanina Pandelescu, Simona Petrescu, Silviu Preda, Gabriela Petcu, Madalina Ciobanu, Luminita Predoana	Comparative study of the TiO ₂ nanopowders prepared from different precursors and chemical methods for heterogeneous photocatalysis application	Journal of Thermal Analysis and Calorimetry, 1-14, 2022	2022
ARTICOLE ALTE BAZE DE DATE				
1				
n				
CARTI				
1	Luminita Predoana, Irina Stanciu, Maria Zaharescu	<i>Metal oxide nanomaterials obtained by sol-gel and microwave assisted sol-gel methods</i>	in book titled 'Advances in Microelectronics: Reviews' Book Series, Vol. 2 Prof dr. Sergey Y. Yurish, chapter 7, Published by International Frequency Sensor Association (IFSA) Publishing, S. L, Spain, ian	2019

			2019, ISBN: 978-84-09-08160-8, page 221-249	
n				
COMUNICARI STIINTIFICE NATIONALE				
1.	Victor Fruth, Luminita Predoana, Iuliana Poenaru, Ligia Todan, Ludmila Aricov, Madalina Ciobanu, Luiza Jecu, Rodica Ion	<i>Multifunctional Metal-Oxide-Nanopowder-Polymer Composite Coatings for Stone Built Heritage Conservation</i>	PRIOCHEM XV – 2019, Bucuresti, 30 Octombrie - 01 Noiembrie 2019, Romania (prezentare orală)	2019
COMUNICARI STIINTIFICE INTERNATIONALE				
1	Victor Fruth, Luminita Predoana, Iuliana Poenaru, Ligia Todan, Ludmila Aricov, Gabriela Petcu, Hermine Stroescu, Iuliana Radut, Mariana Calin, Luiza Jecu	<i>Multifunctional composite coatings with self-cleaning and antimicrobial properties containing oxide nanopowders</i>	5th Conference of the Serbian Society for Ceramic Materials 5SCS-2019 11th – 13th June, 2019 Belgrad Serbia (prezentare orală)	2019
2	Luminita Predoana, Jeanina Pandeale Cusu, Simona Petrescu, Silviu Preda	<i>Thermal behaviour of the TiO₂ powders obtained by microwave-assisted sol-gel method</i>	2nd Journal of Thermal Analysis and Calorimetry Conference (2nd JTACC+V4 2019) June 18-21, 2019 at Budapest, Hungary. (prezentare orală)	2019
3	Victor Fruth, Iuliana Poenaru, Ligia Todan, Ludmila Aricov, Madalina Ciobanu, Luiza Jecu, Rodica Ion, Luminita Predoana	<i>Composite coatings based on sol-gel MgO or TiO₂ oxide nanopowders for buildings and monuments protection</i>	The XX International Sol-gel Conference, 25-30 august 2019, St. Petersburg, Russia (prezentare poster)	2019
ATLASE, DICTIONARE DE SPECIALITATE				
1				
CERERI BREVET DE INVENTII/BREVET OBTINUT				
1	Fruth-Oprișan Victor, Todan Ligia-Carmen, Predoană Luminița, Poenaru Iuliana, Aricov Ludmila, Leontieș Anca Ruxandra, Ciobanu Elena-Madalina, Petcu Gabriela, Ion Rodica-Mariana, Iancu Lorena, Jecu Maria-Luiza, Răut Iuliana, Călin Mariana	Procedeu de obținere a unor pelicule nanocompozite destinate protejării componentelor arhitecturale litice ale patrimoniului cultural.	Acordare brevet inventie nr 134390 august 2021	2021
ALTE rezultate				
1	R.M. Ion, D. Turcanu-Carutiu, L. Predoana, C. Radulescu,	<i>New diagnosis and treatment technologies for the conservation and revitalization of archeological components from national cultural heritage</i>	Medalie de argint, EUROINVENT, Iasi, Romania, 16 - 18 Mai 2019	2019
2	R.M. Ion, D. Turcanu-Carutiu, L. Predoana, C. Radulescu	<i>New diagnosis and treatment technologies for the conservation and revitalization of archeological components from national cultural heritage</i>	Diploma de Excelenta, INVENTICA, Iasi, Romania, 29 - 31 Iulie 2020	2020

Lista achizițiilor realizate în cadrul proiectului

Denumire echipament	Categorie de achiziții*: (numai mijloace fixe)	Valoarea (lei)	Locație
2018			
Pompa de vid,model N816.3KN.18, 16 l/min, vacuum abs.15 mbar, putere 100 W, cu 6 conectori	FF.F009256 27.11. 2008	2439.5	Inst Chimie Fizica Ilie Murgulescu
Regulator de vid pentru pompa N816	FF.F009256 27.11. 2018	1769.9	Inst Chimie Fizica Ilie Murgulescu
Profilometru optic	FFA331865/27.11.2018	110207.0	Inst Chimie Fizica Ilie Murgulescu
Sistem Desktop HP Slimline 290- p001nq cu procesor Intel Core i3-8100	FF.ROWH19990483929 /26.11. 2018	2499.99	Inst Chimie Fizica Ilie Murgulescu
Monitor LED Acer 18.5, Wide, DVI, Negru, V196HQL oduselor include costurile colectarii, tratarii si eliminarii DEEE)	FF.ROWH19990483929 /26.11. 2018	279.99	Inst Chimie Fizica Ilie Murgulescu
Sistem Desktop HP Slimline 290- p001nq cu procesor Intel Core i3-8100	FF.ROWH 199904927794/ 29.11. 2018	2499.99	Inst Chimie Fizica Ilie Murgulescu
Monitor LED Acer 18.5, Wide, DVI, Negru, V196HQL	FF.ROWH 199904927794/ 29.11. 2018	279.99	Inst Chimie Fizica Ilie Murgulescu
Laptop ASUS ROG GL503VD-FY064	FF.ROWH 199904920580/ 29.11. 2018	3999.99	Inst Chimie Fizica Ilie Murgulescu
2019			
Vas digestive acida (celula hidrotermala) 2 buc	FF.OFS191116 22.08. 2019	11205,04	Inst Chimie Fizica Ilie Murgulescu
Obiectiv interferometric Nikon 50x	FF.SCHF023-2019/ 12.11. 2019	24667,51	Inst Chimie Fizica Ilie Murgulescu
Sistem PC all in one Lenovo	FF.ROWH209903822336 /25.09. 2019	3999,99	Inst Chimie Fizica Ilie Murgulescu
Sistem Desktop HP 460-p204nq	FF.ROWH209903822336 /25.09. 2019	1700,00	Inst Chimie Fizica Ilie Murgulescu
Laptop LENOVO 330S	FF. ROWH / 17.09. 2019	3.199.99	Inst Chimie Fizica Ilie Murgulescu
2020			
Microdurimetru dinamic Model DUH-211S - SHIMADZU	FF4580000152/20.11.2020	124950	Inst Chimie Fizica Ilie Murgulescu
Monitor IED ASUS 18.5	FF38063/ 14.08.2020	304,49	Inst Chimie Fizica Ilie Murgulescu
Sistem Desktop HP 460-p204nq	FF38063/ 14.08.2020	2723,91	Inst Chimie Fizica Ilie Murgulescu
2021			
Accesorii Microdurimetru dinamic Model DUH-211S - SHIMADZU	FF4540001332/13.07.2021	27222,01	Inst Chimie Fizica Ilie Murgulescu
Sistem Desktop PC Lenovo	FFROWH/ 01.06.2021	2549,99	Inst Chimie Fizica Ilie Murgulescu

**Responsabil proiect,
Dr. Luminita Predoana**