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### **NOTICE**

### **BASIC INFORMATION**

Position available within the research project entitled: "Direct, sensitive and selective fluorescence "turn-off" detection of metallic contaminants from water using photoluminescent gold nanoclusters", project number PN-III-P1-1.1-TE-2019-0700

Title\*: research assistant (PhD student)

**Offer Description\***: Part-time research assistant position working in the field of controlled synthesis and characterization of gold nanoclusters for detection applications

# **Researcher Profiles \*:** First Stage Researcher (R1) Recognised Researcher (R2) Established Researcher (R3) Leading Researcher (R4) **Physics** Research field \* Temporary Type of Contract\* Part-time Job Status \*: Hours Per Week\*: 20 **Application Deadline \***: 2.10.2020 **Envisaged Job Starting Date**: 15.10.2020 Is the job funded through a EU Research Framework Programme? \* Not funded by an EU programme • Is the Job related to staff position within a Research Infrastructure? (se bifează opțiunea) Contact person\*: CRĂCIUN Ana-Maria

\* - Câmpuri obligatorii

E-mail adress\*: ana.gabudean@ubbcluj.ro

Internal Application form needed (.pdf files) (se bifează opțiunea, dacă este cazul)

# **HIRING INFO & WORK LOCATION**

Number of positions available\*: 1

**Company/Institute\*:** Interdisciplinary Research Institute in Bio-Nano-Sciences, Babes-Bolyai University

**Department\*:** Nanobiophotonics and Laser Microspectroscopy Center

# **REQUIREMENTS**

Required Education Level (se completează unul sau mai multe câmpuri, după caz)

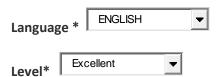
Main Re	search Field*:	Physics		•
Level*:	Master Degree o	r equivalent	•	
Main Re	search Field*:	Please Select		▼
Level*:	Please Select		-	

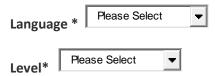
**Skills/Qualifications**: experience in controlled synthesis and characterization of gold nanoclusters for detection applications

Specific Requirements: PhD student in Physics

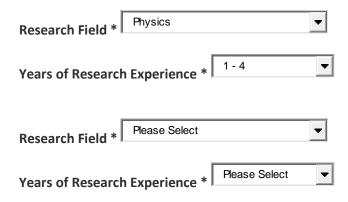
minimum 2 ISI research articles

Required Languages (se completează unul sau mai multe câmpuri, după caz)





Required Research Experience (se completează unul sau mai multe câmpuri, după caz)



### **ADDITIONAL INFO**

Website for additional job details: (câmp opțional)

Benefits: (câmp opțional)

**Selection process**: application evaluation (eliminatory) and interview (a ppt. presentation on the experience in the position research field)

Email for additional job details: ana.gabudean@ubbcluj.ro

# Research and subresearch fields

Agricultural Sciences		5.	Other	13.	Other
		6.	Performing arts	14.	Physical chemistry
1.	Agricultural products	7.	Visual arts	15.	Reaction
2.	Agronomics				mechanisms and
3.	Enology	Astron	omy		dynamics
4.	Forest sciences	1.	Astrophysics	16.	Solar chemistry
5.	Other	2.	• •	17.	Structural chemistry
6.	Phytotechny	3.	Cosmology Other		
7.	Soil science			Commu	unication sciences
8.	Temperate	4.	Biological sciences	1	Audiovioual
	agriculture	5.	Biodiversity	1.	Audiovisual
9.	Tropical agriculture	6.	Biological		communication
10.	Zootechnics	_	engineering	2.	Business
		7.	Biology	_	communication
Anthro	pology	8.	Botany	3.	Editing
1.	Communication	9.	Laboratory animal	4.	Graphic
1.			science		communication
2	anthropology	10.	Nutritional sciences	5.	Journalism
2.	Cultural	11.	Other	6.	Media studies
2	anthropology	12.	Zoology	7.	On-line information
3.	Ethnology				services
_		<u> </u>	_		55.1.555
4.	Medical	Chemis	stry	8.	Other
	anthropology		•	8. 9.	
5.	anthropology Other	1.	Analytical chemistry		Other
	anthropology Other Physical	1. 2.	Analytical chemistry Applied chemistry	9.	Other Public relations
5. 6.	anthropology Other Physical anthropology	1. 2. 3.	Analytical chemistry Applied chemistry Biochemistry	9. 10.	Other Public relations Publishing
5.	anthropology Other Physical	1. 2.	Analytical chemistry Applied chemistry Biochemistry Combinatorial	9. 10.	Other Public relations Publishing Science
<ul><li>5.</li><li>6.</li><li>7.</li></ul>	anthropology Other Physical anthropology Social anthropology	1. 2. 3. 4.	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry	9. 10. 11.	Other Public relations Publishing Science communication
5. 6.	anthropology Other Physical anthropology Social anthropology	1. 2. 3.	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational	9. 10. 11.	Other Public relations Publishing Science communication Speech communication
<ul><li>5.</li><li>6.</li><li>7.</li><li>Archite</li></ul>	anthropology Other Physical anthropology Social anthropology	1. 2. 3. 4.	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational chemistry	9. 10. 11.	Other Public relations Publishing Science communication Speech
<ul><li>5.</li><li>6.</li><li>7.</li><li>Archite</li><li>1.</li></ul>	anthropology Other Physical anthropology Social anthropology ecture Design	1. 2. 3. 4.	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational chemistry Heterogeneous	9. 10. 11. 12.	Other Public relations Publishing Science communication Speech communication ter science
<ul><li>5.</li><li>6.</li><li>7.</li><li>Archite</li></ul>	anthropology Other Physical anthropology Social anthropology ecture  Design Landscape	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> </ol>	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational chemistry Heterogeneous catalysis	<ul><li>9.</li><li>10.</li><li>11.</li><li>12.</li><li>Compute</li><li>1.</li></ul>	Other Public relations Publishing Science communication Speech communication ter science 3 D modelling
<ol> <li>5.</li> <li>6.</li> <li>7.</li> <li>Archite</li> <li>1.</li> <li>2.</li> </ol>	anthropology Other Physical anthropology Social anthropology ecture  Design Landscape architecture	1. 2. 3. 4.	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational chemistry Heterogeneous catalysis Homogeneous	9. 10. 11. 12.	Other Public relations Publishing Science communication Speech communication ter science 3 D modelling Autonomic
5. 6. 7. <b>Archite</b> 1. 2.	anthropology Other Physical anthropology Social anthropology ecture  Design Landscape architecture Naval architecture	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>7.</li> </ol>	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational chemistry Heterogeneous catalysis Homogeneous catalysis	<ol> <li>9.</li> <li>10.</li> <li>11.</li> <li>Compute</li> <li>2.</li> </ol>	Other Public relations Publishing Science communication Speech communication  ter science 3 D modelling Autonomic computing
<ol> <li>5.</li> <li>6.</li> <li>7.</li> <li>Archite</li> <li>1.</li> <li>2.</li> </ol>	anthropology Other Physical anthropology Social anthropology ecture  Design Landscape architecture	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>7.</li> <li>8.</li> </ol>	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational chemistry Heterogeneous catalysis Homogeneous catalysis Inorganic chemistry	<ul><li>9.</li><li>10.</li><li>11.</li><li>12.</li><li>Compute</li><li>1.</li></ul>	Other Public relations Publishing Science communication Speech communication  ter science 3 D modelling Autonomic computing Computer
5. 6. 7. <b>Archite</b> 1. 2.	anthropology Other Physical anthropology Social anthropology ecture  Design Landscape architecture Naval architecture	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>7.</li> </ol>	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational chemistry Heterogeneous catalysis Homogeneous catalysis Inorganic chemistry Instrumental	<ul><li>9.</li><li>10.</li><li>11.</li><li>12.</li><li>Compu</li><li>1.</li><li>2.</li><li>3.</li></ul>	Other Public relations Publishing Science communication Speech communication  ter science 3 D modelling Autonomic computing Computer architecture
5. 6. 7. <b>Archite</b> 1. 2. 3. 4.	anthropology Other Physical anthropology Social anthropology ecture  Design Landscape architecture Naval architecture	1. 2. 3. 4. 5. 6. 7.	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational chemistry Heterogeneous catalysis Homogeneous catalysis Inorganic chemistry Instrumental analysis	9. 10. 11. 12.  Comput. 1. 2. 3.	Other Public relations Publishing Science communication Speech communication  ter science 3 D modelling Autonomic computing Computer architecture Computer hardware
5. 6. 7. <b>Archite</b> 1. 2. 3. 4.	anthropology Other Physical anthropology Social anthropology ecture  Design Landscape architecture Naval architecture Other  Arts management	<ol> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>7.</li> <li>8.</li> </ol>	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational chemistry Heterogeneous catalysis Homogeneous catalysis Inorganic chemistry Instrumental analysis Instrumental	9. 10. 11.  12.  Comput. 1. 2.  3. 4. 5.	Other Public relations Publishing Science communication Speech communication  ter science  3 D modelling Autonomic computing Computer architecture Computer systems
5. 6. 7. Archite 1. 2. 3. 4. Arts	anthropology Other Physical anthropology Social anthropology ecture  Design Landscape architecture Naval architecture Other	1. 2. 3. 4. 5. 6. 7. 8. 9.	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational chemistry Heterogeneous catalysis Homogeneous catalysis Inorganic chemistry Instrumental analysis Instrumental techniques	9. 10. 11. 12.  Comput. 1. 2. 3. 4. 5. 6.	Other Public relations Publishing Science communication Speech communication  ter science  3 D modelling Autonomic computing Computer architecture Computer hardware Computer systems Cybernetics
5. 6. 7. Archite 1. 2. 3. 4. Arts	anthropology Other Physical anthropology Social anthropology ecture  Design Landscape architecture Naval architecture Other  Arts management	1. 2. 3. 4. 5. 6. 7.	Analytical chemistry Applied chemistry Biochemistry Combinatorial chemistry Computational chemistry Heterogeneous catalysis Homogeneous catalysis Inorganic chemistry Instrumental analysis Instrumental	9. 10. 11.  12.  Comput. 1. 2.  3. 4. 5.	Other Public relations Publishing Science communication Speech communication  ter science  3 D modelling Autonomic computing Computer architecture Computer systems

8.	Digital systems	8.	Construction	1.	Education
9.	Informatics		economics	2.	Learning studies
10.	Modelling tools	9.	Consumer	3.	Other
11.	Other		economics	4.	Research
12.	Programming	10.	Cyclical economics		methodology
13.	Systems design	11.	Econometrics	5.	Teaching methods
		12.	Economic policy		
Crimin	ology	13.	Economic systems	Engine	ering
Cultural studies		14.	Economic theory	1.	Aerospace
Cuitui	ai studies	15.	Economics of	1.	engineering
1.	African studies		development	2.	Agricultural
2.	American studies	16.	Environmental	۷.	engineering
3.	Ancient studies		economics	3.	Biomaterial
4.	Anglo Saxon studies	17.	Financial science	5.	engineering
5.	Arabic studies	18.	Fishery economy	4.	Biomedical
6.	Asian studies	19.	Food economics	4.	engineering
7.	Byzantine studies	20.	Health economics	5.	Chemical
8.	Coptic studies	21.	Home economics	J.	engineering
9.	Eskimo studies	22.	Industrial economics	6.	Civil engineering
10.	European studies	23.	International	7.	Communication
11.	Islamic studies		economics	<i>,</i> .	engineering
12.	Jewish studies	24.	Knowledge economy	8.	Computer
13.	Middle Ages studies	25.	Labour economics	0.	engineering
14.	Middle East studies	26.	Labour market	9.	Control engineering
15.	Oriental studies		economics	9. 10.	Design engineering
16.	Other	27.	Land economy	11.	Electrical
17.	Regional studies	28.	Local public	11.	engineering
18.	Renaissance studies		economics	12.	Electronic
19.	Russian studies	29.	Macroeconomics	12.	engineering
20.	Third world studies	30.	Management studies	13.	Geological
Demog	graphy	31.	Marketing	15.	engineering
Economics		32.	Microeconomics	14.	Industrial
		33.	Other		engineering
1	A deciminate entire	34.	Political economy	15.	Knowledge
1.	Administrative sciences	35.	Production	13.	engineering
2			economics	16.	Maritime
2.	Agricultural economics	36.	Social economics	10.	engineering
2		37.	Tourism studies	17.	Materials
3. 4.	Applied economics	38.	Transport economics	_,,	engineering
	Banking  Business economics	39.	Valuation	18.	Mechanical
5. 6.	Business economics	40.	Veterinary	20.	engineering
	Cadastral survey Commercial		economics	19.	Microengineering
7.				20.	Nuclear engineering
	economics	Educat	cional sciences	21.	Other
					2.1.01

22.	Precision	1.	Ancient history	3.	Comparative law	
	engineering	2.	Archaeology	4.	Criminal law	
23.	Process engineering	3.	Art history	5.	Environmental law	
24.	Project engineering	4.	Church history	6.	European law	
25.	Simulation	5.	Contemporary	7.	Finance law	
	engineering		history	8.	Fiscal law	
26.	Sound engineering	6.	Economic history	9.	Health law	
27.	Surveying	7.	Genealogy	10.	Informatic law	
28.	Systems engineering	8.	Heraldry	11.	International law	
29.	Thermal engineering	9.	History of agriculture	12.	Judicial law	
30.	Water resources	10.	History of design	13.	Juvenile law	
	engineering	11.	History of law	14.	Labour law	
	88	12.	History of	15.	Media law	
Enviro	nmental science		performance	16.	Medical law	
		13.	History of	17.	Other	
1.	Earth science	10.	philosophy	18.	Private law	
2.	Ecology	14.	History of religions	19.	Public law	
3.	Global change	15.	History of science	20.	Roman law	
4.	Natural resources	16.	History of social	21.	Social law	
	management	10.	sciences	22.	Transportation law	
5.	Other	17.	Local history	22.	Transportation law	
6.	Water science	18.	Medieval history	Langu	age sciences	
Γ±b:oo	in health sciences	19.	Modern history			
Ethics	in nearth sciences	20.	Music history	1.	Languages	
Ethics	in natural sciences	21.	Numismatics	2.	Linguistics	
		22.	Other	3.	Other	
Ethics	in physical sciences	23.		4.	Philology	
		23. 24.	Paleography Political history			
Ethics in social sciences		2 <del>4</del> . 25.	Prehistory	Litera	Literature	
Coore	h	25. 26.	Sigillography	1.	African literature	
Geogra	арпу			2.	American literature	
1.	Cartography	27.	Social history	3.	Asian literature	
2.	Economic geography	Inforn	nation science	4.	Austronesian	
3.	Geopolitics				literature	
4.	Historical geography	1.	Archivistics	5.	Comparative	
5.	Human geography	2.	Diplomatics	5.	literature	
6.	Other	3.	Documentation	6.	European literature	
7.	Regional geography	4.	Information	7.	Greek literature	
8.	Social geography		management	8.	Hamito-semitic	
O.	300iai 8008i apiiy	5.	Library science	0.	literature	
Geosci	iences	6.	Other	9.	Literary criticism	
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1.	Geology	Juridio	cal sciences	10.	Other	
2.	Hydrology	1	Agrarian law	11.	Writing	
3.	Other	1.	Agrarian law	Techr	nology	
Histor	У	2.	Canon law		<i>5,</i>	

1.	Biotechnology	33.	Instrumentation	2.	Psychoanalytic
2.	Chemical technology		technology		studies
3.	Energy technology	34.	Materials technology	3.	Behavioural sciences
4.	Environmental	35.	Measurement	4.	Cognitive science
	technology		technology	5.	Other
5.	Future technology	36.	Nanotechnology	Naum	
6.	Electrical technology	37.	Nuclear technology	Neur	rosciences
7.	Dating techniques	38.	Optronics	1.	Neurology
8.	Communication	39.	Mining	2.	Neurophysiology
	technology	40.	Military technology	3.	Neuropsychology
9.	Computer	41.	Medical technology	4.	Neuroinformatics
	technology	42.	Micro-technology	5.	Neurochemistry
10.	Construction	Dalia:	·	6.	Neurobiology
	technology	Kelig	ious sciences	7.	Other
11.	Graphic techniques	1.	Biblical studies		
12.	High vacuum	2.	Church studies	Phar	macological sciences
	technology	3.	Comparative religion		
13.	Space technology	4.	Non-Christian	1.	Clinical
14.	Standardisation of		religions		pharmacology
	technologies	5.	Theology	2.	Cosmetology
15.	Telecommunications	6.	Other	3.	Pharmacognosy
	technology	7.	Pastoral studies	4.	Pharmacy
16.	Sound technology	,.	r astorar statics	5.	Toxicology
17.	Safety technology	Socio	logy	6.	Veterinary
18.	Production				pharmacology
	technology	1.	Sociology of religion	7.	Other
19.	Quantum technology	2.	Urban sociology	NAS+k	nematics
20.	Remote sensing	3.	Sociology of labour	iviati	iematics
21.	Transport	4.	Sociology of	1.	Combinatorial
	technology		enterprise		analysis
22.	Vacuum technology	5.	Social shaping of	2.	Computational
23.	Water technology		technology		mathematics
24.	Pharmaceutical	6.	Societal behaviour	3.	Discrete
	technology	7.	Socio-economic		mathematics
25.	Other		research	4.	Chaos theory
26.	Knowledge	8.	Social changes	5.	Applied
	technology	9.	Rural sociology		mathematics
27.	Laboratory	10.	Educational	6.	Algebra
	technology		sociology	7.	Algorithms
28.	Marine technology	11.	Macrosociology	8.	Geometry
29.	Internet technology	12.	Other	9.	Mathematical
30.	Interface technology	D			analysis
31.	Industrial technology	Psycr	nological sciences	10.	Statistics
32.	Information	1.	Psychology	11.	Probability theory
	technology	<b>-</b> ·	. 0,001	12.	Other

13. Mathematical logic14. Number theory

# **Philosophy**

- 1. Ethics
- 2. Metaphysics
- 3. Epistemology
- 4. Aesthetics
- 5. Other
- 6. Logic
- 7. Philosophical anthropology
- 8. Phenomenology
- 9. Philosophy of law
- 10. Philosophy of science
- 11. Semiotics
- 12. Systematic philosophy

### **Medical sciences**

- 1. Veterinary medicine
- 2. Other
- 3. Medicine

### **Political sciences**

- 1. Science and society
- 2. Policy studies
- 3. Public awareness of science
- 4. Public policy
- 5. Other
- 6. Governance

# **Physics**

- 1. Other
- 2. Quantum mechanics
- 3. Relativity
- 4. Solid state physics
- 5. Optics
- 6. Neutron physics
- 7. Electronics

- 8. Mathematical physics
- 9. Metrology
- 10. Statics
- 11. Statistical physics
- 12. Surface physics
- 13. Thermodynamics
- 14. Electromagnetism
- 15. Condensed matter properties
- 16. Acoustics
- 17. Classical mechanics
- 18. Computational physics
- 19. Chemical physics
- 20. Biophysics
- 21. Applied physics