



## Europass Curriculum Vitae

### Personal information

First name(s) / Surname(s) **NEDELCU DAN ALIN**  
Address(es) 041655 Vatra Dornei 5, sector 4, Bucharest, Romania  
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Nationality Romanian  
Date of birth March 9, 1976  
Gender Male

### Work experience

Dates 2008 - present  
Occupation or position held Scientific researcher III  
Main activities and responsibilities Astronomical observations, data analysis, participation in research projects in the fields of Astrometry and Planetology, editor of the Romanian Astronomical Yearbook  
Name and address of employer Astronomical Institute of the Romanian Academy (AIRA), Fundamental Astronomy Department, 040557, Bucharest, Str. Cușitul de Argint 5, sector 4  
Type of business or sector Research & Development

Dates February 2006 – August 2007  
Occupation or position held Scientific researcher  
Main activities and responsibilities Astrometry, photometry and spectroscopy of ESA's Rosetta space mission targets  
Name and address of employer European Space Agency, Paris HQ, ESA's traineeship program.  
Institut de mécanique céleste et de calcul des éphémérides, Paris Observatory  
Laboratoire d'études spatiales et d'instrumentation en astrophysique, Paris Observatory  
Type of business or sector Research & Development

Dates 2006 - 2008  
Occupation or position held Scientific researcher  
Main activities and responsibilities Astronomical observations, data analysis, participation in research projects in the field of Astrometry  
Name and address of employer Astronomical Institute of the Romanian Academy (AIRA), Fundamental Astronomy Department, 040557, Bucharest, Str. Cușitul de Argint 5, sector 4  
Type of business or sector Research & Development

Dates 2003 – 2006  
Occupation or position held Research assistant  
Main activities and responsibilities Astronomical observations & data analysis  
Name and address of employer Astronomical Institute of the Romanian Academy (AIRA), Fundamental Astronomy Department, 040557, Bucharest, Str. Cușitul de Argint 5, sector 4  
Type of business or sector Research & Development

Dates	2001 - 2002
Occupation or position held	Network and system administrator
Main activities and responsibilities	Network administration for 200 dial-up users system. Web design
Name and address of employer	Romania Data System, Slatina Branch, Olt
Type of business or sector	Private sector
<b>Education and training</b>	
Dates	2007 - 2010
Title of qualification awarded	PhD in Astronomy and Astrophysics
Principal subjects/occupational skills covered	Thesis Title: " <i>Modélisation dynamique et spectroscopique des astéroïdes. Applications aux géocroiseurs et aux cibles de missions spatiales</i> ".
Name and type of organisation providing education and training	École Doctorale d'Astronomie & d'Astrophysique d'Ile-de-France, Observatoire de Paris
Dates	1998 - 2000
Title of qualification awarded	MSc Physics
Principal subjects/occupational skills covered	Theoretical physics
Name and type of organisation providing education and training	Faculty of Physics, University of Craiova, Romania
Dates	1999 – 2000
Title of qualification awarded	-
Principal subjects/occupational skills covered	MSc Student in the Erasmus-Socrates program Theoretical physics
Name and type of organisation providing education and training	Institute for Theoretical Physics, University of Hannover, Germany
Dates	1994 – 1998
Title of qualification awarded	BSc Physics
Principal subjects/occupational skills covered	Theoretical physics
Name and type of organisation providing education and training	Faculty of Physics, University of Craiova, Romania
Dates	1990 – 1994
Title of qualification awarded	Baccalaureate Diploma
Principal subjects/occupational skills covered	Mathematics and physics
Name and type of organisation providing education and training	Slatina, Olt, Industrial High school 3, mathematics-physics profile
<b>Personal skills and competences</b>	
Mother tongue(s)	<b>Romanian</b>

Other language(s)

Self-assessment

European level (\*)

**English**

**French**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	B2	Proficient user
B1	Proficient user	B1	Proficient user	B1	Independent user	B1	Independent user	A2	Independent user

Social skills and competences

Team work: I have worked in research teams at Astronomical Institute of the Romanian Academy (AIRA) and in Paris Observatory

Infrared spectroscopy of solar system bodies using SpexTool, IRAF and Autospex

Project director of PNII RU-TE project Physical Studies of Solar System Bodies, total budget 165k Euro, leading a team of 4 scientists

Principal investigator of the observational program "The Missing V-type NEAs" awarded 16h of observations on NASA IRTF 3m telescope using SpeX/MORIS instruments

Computer skills and competences

Author of astronomical data acquisition, reduction and analysis software with over 10000 lines of code in ANSI C developed on \*NIX systems. Good knowledge of Linux system administration and programming.

Driving licence

B category

### Additional information

#### AFFILIATIONS

Research associate of Institut de mécanique céleste et de calcul des éphémérides, Paris Observatory

Member of International Astronomical Union Division F, Commission 15 "Physical Study of Comets & Minor Planets" & Commission 20 "Positions & Motions of Minor Planets, Comets and Satellites"

Member of Romanian National Committee of Astronomy, contact person president dr. Popescu P., Astronomical Institute of the Romanian Academy (AIRA) – Bucharest Observatory, 040557, Str. Cușitul de Argint 5, sector 4, Bucharest, Romania

#### PARTICIPATION IN SCIENTIFIC RESEARCH PROJECTS AND PROGRAMMES

Aerospațial / Dezvoltarea și aplicarea tehnicilor optoelectronice de achiziție și prelucrare a imaginilor, AIRA, 2003-2004, participant

Aerospațial / Modelarea numerică a dinamicii asteroizilor AIRA, 2004-2006, participant

Aerospațial / Metode astroseismologice cu aplicații la misiunile spațiale de profil, AIRA, 2004-2005

Monitorizarea tranzitelor planetelor Mercur și Venus peste discul solar (UNESCO Project), AIRA, 2003-2004

Aerospațial / Sistem pentru monitorizarea obiectelor cosmice potențial periculoase pentru Pământ, AIRA, 2004-2006, participant

Aerospațial / Centru de excelență (CEEX) Institutul Astronomic al Academiei Române, AIRA, 2002-2005, participant

CEEX / Platforma tehnologică națională de dinamică spațială, AIRA, 2005-2008, participant

CEEX / Modul autonom pentru observații astronomice în mediul polar – PROTEL, AIRA, 2005-2008, participant

PECS (Plan for European Cooperating States) / GAIA (Global Astrometric Interferometer for Astrophysics) – Improving relative positions of reference stars around ICRF radio-sources, AIRA, 2004-2009, participant

PNII RU-TE Physical Studies of Solar System Bodies, 2011-2014, AIRA, Project director

#### PUBLICATIONS LIST

Full list available at: <http://www.researcherid.com/rid/B-1238-2011>

Total ISI articles: 17

Sum of time cited: 68

h-index: 5

#### MOST REPRESENTATIVE PUBLICATIONS

**Nedelcu, D. A.**, Birlan, M., Souchay, J., Assafin, M., Andrei, A. H., Badescu, O., Popescu, P., Paraschiv, P., "Apparent close approaches between near-Earth asteroids and quasars . Precise astrometry, frame linking", *Astronomy & Astrophysics*, 2010, Jan, 509, A27+

**Nedelcu, D. A.**, Birlan, M., Vernazza, P., Binzel, R. P., Fulchignoni, M., Barucci, M. A., "E-type asteroid (2867) Steins: flyby target for Rosetta", *Astronomy & Astrophysics*, 2007, Oct, 473, L33-L36

**Nedelcu, D. A.**, Birlan, M., Vernazza, P., Descamps, P., Binzel, R. P., Colas, F., Kryszczyńska, A., Bus, S. J., "Near infra-red spectroscopy of the asteroid 21 Lutetia. II. Rotationally resolved spectroscopy of the surface", *Astronomy & Astrophysics*, 2007, Aug, 470, p1157-1164

Birlan, M., **Nedelcu D. A.**, Descamps, P., Berthier, Jerome, Marchis, F., Merouane, S., "Spectral properties of (854) Frostia, (1333) Cevenola, and (3623) Chaplin", *Monthly Notices of the Royal Astronomical Society*, 2011, Jul, 415, p587-595

Birlan, M., **Nedelcu, D. A.**, "The Physics of Asteroids, Their Junction with Dynamics", Book *Lecture Notes in Physics, Berlin Springer Verlag*, 2010, Mar, 790, ed J. Souchay and R. Dvorak, p229-250

Assafin, M., **Nedelcu, D. A.**, Badescu, O., Popescu, P., Andrei, A. H., Camargo, J. I. B., da Silva Neto, D. N., Vieira Martins, R., "Optical astrometric positions of 59 northern ICRF radio sources", *Astronomy & Astrophysics*, 2007, Dec, 476, p989-993

Birlan, M., **Nedelcu, D. A.**, Lainey, V., Arlot, J.-E., Binzel, R. P., Bus, S. J., Rayner, J., Thuillot, W., Vaduvescu, O., Colas, F., "Photometric, astrometric analysis of a mutual event between the Uranian satellites Miranda, Oberon", *Astronomische Nachrichten*, 2008, Jul, 329, p567-572