

INFORMAȚII PERSONALE



Cristian Coldea, Dr.-Ing.

 bdul. Muncii 103-105, Cluj-Napoca, 400641 Cluj-Napoca (România)

 cristi.coldea@auto.utcluj.ro

 Yahoo! Messenger (YIM) rdt_33

Sexul Masculin | Data nașterii 10 Ian 70 | Naționalitatea română

LOCUL DE MUNCĂ DORIT

Lecturer > Assistant Professor

EXPERIENȚA PROFESIONALĂ

2008–Prezent

Lecturer

Technical University of Cluj-Napoca, Cluj-Napoca (România)

Research activities in the fields of internal combustion engines, fuels and lubricants, traffic optimization (3 grants).

Teaching activities according to Romanian syllabus, main disciplines being:

1) Internal Combustion Engine - projects and laboratory activities, graduate (Masters) and partly undergraduate level,

2) Fuels and Lubricants - laboratory activities, undergraduate level,

3) Management - seminars and courses, undergraduate level,

4) Transport Economics - seminars and courses, undergraduate level,

5) Geographical Information Systems - courses, laboratory activities and projects, graduate (Masters) level.

Students tutor.

Member of the organizing team of AMMA 2013 International Congress (Cluj-Napoca).

Secretary of the Cluj-Napoca branch of the Romanian Society of Automotive Engineers.

Technical Editor of Acta Mecanica scientific magazine.

2004–2008

Assistant

Technical University of Cluj-Napoca, Cluj-Napoca (România)

Research activities in the fields of internal combustion engines, fuels and lubricants, traffic optimization (8 grants);

Teaching activities according to Romanian syllabus, main disciplines being:

1) Internal Combustion Engine - projects and laboratory activities, undergraduate level,

2) Fuels and Lubricants - laboratory activities, undergraduate level,

3) Management - seminars, undergraduate level,

Students tutor.

Member of the organizing team of AMMA 2007 International Congress (Cluj-Napoca).

Member of the organising team of the workshop "IT systems for monitoring and safety of road traffic", 12 June 2007 (Cluj-Napoca).

Secretary of the Cluj-Napoca branch of the Romanian Society of Automotive Engineers.

Technical Editor of Acta Mecanica scientific magazine.

2001–2004

Graduate assistant

Technical University of Cluj-Napoca, Cluj-Napoca (România)

Research activities in the field of internal combustion engines and fuels (5 grants);

Teaching activities according to Romanian syllabus, main disciplines being:

1) Internal Combustion Engine - projects and laboratory activities, undergraduate and graduate (Masters) level,

2) Fuels and Lubricants - laboratory activities, undergraduate level,

Elaboration of scientific paper works (total 3, co-author).

Member of the organizing team of AMMA 2002 International Congress (Cluj-Napoca).

Secretary of the Cluj-Napoca branch of the Romanian Society of Automotive Engineers.

2000–2001 **Service engineer**

DAF Trucks Romania, SC DAF CLUJ SRL, Cluj-Napoca (România)

Diagnosis of trucks and trailers;

Intervention to mechanical, electrical and electronically issues.

EDUCAȚIE ȘI FORMARE

2015 **Basics of Teamcenter Platform by Siemens**

ADA Computers SRL, Cluj-Napoca (România)

Basic specific topics were covered during this brief course, e.g. PLM - Product Life-cycle Management, concept of Industrie 4.0, datasets, revisions, production structures, initiating and managing workflows, integration with Siemens NX and MS Office, Change Management.

2007 **Using of traffic equipment.**

DataCollect GmbH, Kerpen (Germany)

Training on traffic equipment (DSD and SDR).

2007 **Training on GPS equipment using (certificate issued)**

SC Geosystems SRL, Bucharest (România)

Using of GPS measurement equipment.

2007 **Training on using ArcMap and ArcCatalog application from ESRI (certificate issued)**

SC Geosystems SRL, Bucharest (România)

Introduction to ArcMap and ArcCatalog software application.

2007 **Training on using ArcMap and ArcCatalog application from ESRI (certificate issued)**

SC Geosystems SRL

User of Spatial Analyst module.

11/2006 **Documentation and research visit, exchange of experience**

Hohenheim University, Hohenheim (Germany)

Documentation and research visits and fruitful exchange of experience on bio fuel and renewable energy.

- 10/2001–06/2006 **PhD stage** Nivelul 8 CEC
 Technical University of Cluj-Napoca, Cluj-Napoca (România)
 The PhD stage finalized with public doctoral thesis on internal combustion engine cooling (Dr.-Ing. degree).
 Dissertation (Dr.-Ing.) title: "**Research regarding the internal combustion engine differentiated cooling in order to reduce fuel consumption and pollution, and to increase output**", most of the research and experimental work being oriented toward Diesel engine cooling.
- 2001–2002 **Master level** Nivelul 7 CEC
 Technical University of Cluj-Napoca, Cluj-Napoca (România)
 Master Specialization: "**Computer aided analysis and experimental research in mechanical engineering**".
- 1996–2001 **Graduate level** Nivelul 6 CEC
 Technical University of Cluj-Napoca, Cluj-Napoca (România)
 Mechanical engineering, Specialization "**Road Vehicles**", **top of the form (2001)**.
 In 1997 I was member of the team (3 members, in total) selected to represent Technical University of Cluj-Napoca at the Strength of Materials National Contest (Pitesti, Romania).
- 1984–1988 **High school** Nivelul 4 CEC
 Liceul "Emil Racovita", Cluj-Napoca (România)
 High school diploma (1988).

COMPETENȚE PERSONALE

Limba(i) maternă(e) română

Alte limbi străine cunoscute

	ÎNȚELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
engleză	B2	C1	B2	B2	B2
franceză	A2	A2	A2	A2	A2
germană	A2	A2	A2	A2	A2

Niveluri: A1 și A2: Utilizator elementar - B1 și B2: Utilizator independent - C1 și C2: Utilizator experimentat
 Cadrul european comun de referință pentru limbi străine

Competențe de comunicare

Good communication skills gained through my experience as teacher and researcher and during my "heavy-trucker" and administrator time (by managing transport and service in both directions: staff/suppliers and drivers).

Competențe organizaționale/manageriale

- 1) Good organizational skills gained as a Management teacher and business administrator, and as a main contributor to preparation/organization of high leveled professional meetings (e.g., International Congresses AMMA 2002, 2007, 2013 held in Cluj-Napoca, Romania).
- 2) Good team-integration capabilities gained through membership of 16 research teams.
- 3) High capability to quickly adapt in new work environment.

Competențe dobândite la locul de muncă

- 1) Mathematical skills (modeling and simulation) gained through education, research activity and teaching experience. I'm comfortable and have a good understanding of engineering related mathematical topics (e.g., data fitting, optimization methods, integral and differential calculus, linear programming, statistics, fuzzy logic).
- 2) Research skills gained through research activity (e.g., internal combustion engine - specialized on Diesel - cooling and heat exchange, theory of internal combustion engine, mineral and bio fuels, vegetable oils and alcohols, lubricants, experimental methods and equipment).
- 3) During the last few years I was able to gain good coding skills by self-learning and sustained effort, being hired several times by private companies or individuals to code specific applications.
- 4) In the last couple of years I became preoccupied with Big Data topic (hence I'm learning R).

Competență digitală

AUTOEVALUARE				
Procesarea informației	Comunicare	Creare de conținut	Securitate	Rezolvarea de probleme
Utilizator experimentat	Utilizator experimentat	Utilizator experimentat	Utilizator independent	Utilizator independent

Competențele digitale - Grilă de auto-evaluare

Good command of:

- 1) OSs - Windows, Linux (Ubuntu).
- 2) MS Office (Word, Excel, PowerPoint).
- 2) Matlab and MathCad.
- 3) AutoCad and SolidEdge.
- 4) Siemens Teamcenter.
- 5) Adobe Illustrator, InDesign and Photoshop.
- 6) ArcGIS (ESRI).
- 7) Various IDEs and platforms (e.g. MS Visual Studio, Eclipse, RStudio).
- 8) Programming skills: C/C++, Python, Ruby, R.

Alte competențe

- 1) A proved capability of self-teaching and self-training, in various domain of science and life.
- 2) Passionate mechanic, I use to maintain and repair my old Mercedes 190 (at least up to a certain level of complexity).
- 3) Passionate reader.
- 4) Trekking and mountaineering.
- 5) History of technics.
- 6) European history.

Permis de conducere

AM, A1, A2, A, B1, BE, C1, C1E, B, C, CE

INFORMAȚII SUPLIMENTARE

Publicații

Elaboration of 7 books:

- a) General Management, UTPRESS Publishing House, Cluj-Napoca, 2015, ISBN 978-606-737-112-3,
- b) Mathematical Applications in Management and Marketing (co-authored), publishing phase;
- c) Transport Economics, elaboration phase,

d) Basics of Geographical Information Systems for Engineers, preparation phase.

Three books elaborated:

e) Renewable Energy Resources in Agriculture (complete presentation: Burnete, N., Rus, I., Roș, V., **Coldea, C.**, Cordoș, N., Chira, T. Surse de energie pentru agricultură. Cluj-Napoca, Editura Alma Mater, 2004, ISBN 973-8397-92-8),

f) Bio fuels for farming and tractors (complete presentation: Burnete, N., Bățaș, N., Brânzaș, P., Naghiu, A., Filip, N., Barabás, I., Todoruț, A., Cordoș, N.N., Chintoanu, M., Coman, Virginia, Abraham, B., Ivan, I., **Coldea, C.**, Varga, B., Costea, C., Borza, E., Vlad, N., *Rapița – o provocare pentru fermieri și energeticieni*. Cluj-Napoca, Editura Sincron, 2004, ISBN 973-9234-57-7),

g) Internal Combustion Engine Cooling (complete presentation: **Coldea, C.** Răcirea motoarelor cu ardere internă. Cluj-Napoca, Editura Alma Mater, 2007, ISBN 978-973-7898-80-7);

Elaboration of scientific paper works (total 26, 7 being first or single author), mainly at international conferences and congresses; here is a brief selection:

a) Burnete, N., Coman, V., Filip, N., **Coldea, C.**, Varga, B., Research concerning the Diesel engine using vegetal oil as fuel. World Automotive Congress, Barcelona 23-27 May 2004,

b) **Coldea, C.**, Bataga, N., Heat exchange between cylinder head, cylinder block and external atmosphere in the case of a compression ignition engine. În: International Automotive Congress, CONAT 2004, Brașov, October 20–22, 2004,

c) **Coldea, C.**, Bataga, N., Burnete, N., Pasla, Doina, Pasla, A., Researches regarding the optimization for some kinetic and thermal characteristics of the fuels for CIE. 8th International Research/Expert Conference "Trends in the Development of Machinery and Associated Technology", TMT 2004, Neum, Bosnia and Herzegovina, 15-19 September, 2004,

d) Todoruț, A., Barabas, I., **Coldea, C.**, Mariașiu, F., Mathematical modeling of the working cycle of the compression ignition engine fueled with sunflower oil comparative with mineral diesel fueling. Cluj-Napoca, Buletinul Științific al U.T.C-N., Acta Technica Napocensis, Section: Machines Construction. Materials, nr. 48, 2005, Editura U.T. PRES, ISSN 1224-9106,

e) Căzilă, Aurica, Turcu, I., Kereches, G., **Coldea, C.**, Morar, L., The biofuels influence over the debit uniformity of the injection pumps and injectors. KOD 2006, Yugoslavia,

f) **Coldea, C.**, Aspects regarding thermal state of the compression ignition engine cylinder head when differentiated cooling is applied comparative with classical cooling. International Congress AMMA 2007 "Automobile, Environment and Farm Machinery", 11-13 October, Cluj-Napoca, ISSN 1221-5872,

g) **Coldea, C.**, Filip, N., Extension of GPS equipment usage at break traces mapping needed to road crashes reconstruction. International Congress AMMA 2007 "Automobile, Environment and Farm Machinery", 11-13 October, Cluj-Napoca, ISSN 1221-5872;

Prezentări In 2007 I lectured on GPS application to road traffic, workshop entitled "IT systems for monitoring and safety of road traffic", 12 June 2007.

Afilieri Member of the Romanian Society of Automotive Engineers.
Member of the French Society of Automotive Engineers.