



**Europass
Curriculum Vitae**

Personal information

First name(s) / Surname(s) **CONSTANTIN MOLDOVEANU**
Address(es)
Telephone(s)
E-mail office@novaindustrialisa.ro
Nationality Romanian
Gender Male

**Desired employment /
Occupational field**

Work experience

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| Dates | January 2002 - present |
| Occupation or position held | General Manager |
| Main activities and responsibilities | |
| Name and address of employer | SC NOVA INDUSTRIAL SA Bucharest |
| Type of business or sector | The company's management in all aspects of business, technical, economical, human, etc. |
| Dates | Aug. 1999 - Ian. 2002 |
| Occupation or position held | Director of the Electrical Transmission and Distribution Center and Senior Scientific Researcher of 1 st degree |
| Name and address of employer | Romanian Power Grid Company "Transelectrica" - Energy Research and Modernizing Institute, ICEMENERG Bucharest |
| Type of business or sector | Management of the Electrical Research and Engineering Center on issues of electrical transmission and distribution; Coordinating the research centre on issues of studies, researches , electrical engineering and consultancy for high, medium or low voltage equipment in the power field; Project director for more research works and technological engineering. |
| Dates | Ian.1998 - Aug. 1999 |
| Occupation or position held | Head of Power Transformers and Electrical Apparatus Department and Senior Scientific Researcher of 1 st degree |
| Name and address of employer | Romanian Electric Power Corporation (CONEL) - Energy Research and Modernizing Institute, ICEMENERG Bucharest |
| Type of business or sector | Management of research and technological engineering department on high, medium and low voltage power equipment in the power field; Coordinating the department's activities on issues of studies, research, electrical engineering and consultancy for high, medium or low voltage equipment in the power field; Project director for more research works and technological engineering; Project director for more research works and technological engineering in the power field |

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| Dates | 1995 - 1997 |
| Occupation or position held | Head of the Power Transformers and Electrical Apparatus Laboratory and Senior Scientific Researcher of 1 st degree |
| Name and address of employer | Romanian Electricity Authority (RENEL) - Studies, Research and Engineering Group (GSCI) |
| Type of business or sector | Coordinating the department's activities on issues of studies, research, electrical engineering and consultancy for high, medium or low voltage equipment in the power field; Project director for more research works and technological engineering in the power field |
| Dates | 1985 - 1995 |
| Occupation or position held | Head of Power Transformer Division and Senior Scientific Researcher of 1 st degree (since 1990), 2 nd degree respectively (since 1985) within Power Transformers and Electrical Apparatus Laboratory; |
| Name and address of employer | Romanian Energy Power Ministry MEE - Energy Research and Modernizing Institute, ICEMENERG Bucharest |
| Type of business or sector | Coordinating the division's activities on issues of studies, research, electrical engineering and consultancy for power and distribution transformers; Project director for more research works and technological engineering |
| Dates | 1972 - 1985 |
| Occupation or position held | Senior Scientific Researcher of 3 rd degree (din 1977) and scientific researcher (since 1972) |
| Name and address of employer | Romanian Energy Power Ministry MEE - Energy Research and Modernizing Institute, ICEMENERG Bucharest |
| Type of business or sector | Research activities and technological engineering in power transformers and high voltage techniques within the High Voltage Research Laboratory – Power Transformers' Staff |
| Dates | 1968 - 1972 |
| Occupation or position held | Junior scientific researcher |
| Name and address of employer | Romanian Energy Power Ministry - The Electro-energetic and Thermo-energetic Research Institute (ICENERG) |
| Type of business or sector | Research activities and technological engineering in the field of power transformers and high voltage techniques within the Laboratory of High Voltage Technique – Power Transformers' Staff |
| Education and training | |
| Dates | 1973 - 1980 studying for PhD degree |
| Title of qualification awarded | Doctor engineer – Ph.D., title achieved since 1980 |
| Principal subjects/occupational skills covered | Ph.D. dissertation: " <i>Theoretical and experimental contributions regarding the methods of measurement of the partial discharges in transformers</i> " |
| Name and type of organisation providing education and training | Polytechnic Institute of Iasi, Electrotechnical Faculty, 1980 |
| Dates | 1963 - 1968 |
| Title of qualification awarded | Diplomate engineer |
| Name and type of organisation providing education and training | Polytechnic Institute of Bucharest Electrotechnical Faculty – Electrical Machines and Apparatus Department |

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| Dates | 1959-1963 |
| Title of qualification awarded | High School Diploma |
| Name and type of organisation providing education and training | "Mihai Viteazu" High School, Fetesti, Romania |
| International stages | (abstract) |
| Dates | June 1–September 30, 1995 (Hitachi and Tokyo) |
| Title of qualification awarded | Scientific research stage on issues : <i>"Expert systems for on and off-line monitoring of large power transformers. Expert system for on-line monitoring of H₂, CO, CH₄, C₂H₂, C₂H₄ and C₂H₆ gases dissolved in transformer oil"</i> |
| Name and type of organisation providing education and training | Japan - Japan Society for Promotion of Science (JSPS) + Ibaraky University + Ibaraki Research Institute (the "Memorandum of understanding on the exchange of specialists between the Ministry of Research and Technology of Romania and the Japan Society for the Promotion of Science) |
| Dates | June 30 – July 30, 1981 and 1983 (Paris) |
| Title of qualification awarded | Scientific research activity on issues: <i>"Detection of transformer winding deformations based on low voltage impulse method and on the analysis of frequency response method, respectively"</i> |
| Name and type of organisation providing education and training | France: EdF – DER (Direction des Etudes et Recherches d'Electricite de France) based on scientific cooperation Agreement between EdF and Romanian Energy Power Ministry |
| Dates | October, 1976 (Zaporozhye) |
| Title of qualification awarded | Scientific research activity on issues: <i>"Partial Discharge Measurements and Diagnostics on Power Transformers"</i> |
| Name and type of organisation providing education and training | Ukraine: Transformer Research Institute and the ZTZ Transformer Factory of Zaporozhye based on scientific cooperation agreement between Romania and Ukraine |
| International professional activity | (abstract) |
| Dates | 1981, 1982, 1983, 1984, 1988. |
| Principal subjects | Short circuit tests on power transformers |
| Name and type of organisation providing to co-operation | France: EdF – DER (Direction des Etudes et Recherches d'Electricite de France) based on scientific cooperation Agreement between EdF and Romanian Energy Power Ministry |
| Dates | 1993 |
| Principal subjects | Technical consultancy for Romanian Electricity Authority (RENEL) at signing of the contract for the acquisition of three automatic chromatographic analysis systems of the free gases (gas mixture samples taken off the power transformer Bchholz relay) and of the gases dissolved transformer insulating oils |
| Name and type of organisation providing to co-operation | GERMANY Siemens" Society - Karlsruhe |
| Dates | 1988 |
| Principal subjects | Technical consultancy for the Romanian Energy Power Ministry MEE - Industrial Center for Power Production – CIPEET at the factory acceptance testing of one 80 MVA 121/10,6 kV power transformer for Brazi Thermal Power Plant |
| Name and type of organisation providing to co-operation | Ukraine - ZTZ Zaporojie Power Transformers Factory |
| Dates | 1984, 1986 |

Principal subjects | Technical consultancy for the Romanian Energy Power Ministry MEE - Industrial Center for Electricity Transmission and Distribution - CIDEE at the factory acceptance testing of 6 pcs. AODTTN de 417/417/80 MVA 750√1,73/400√1,73/15,75 kV power autotransformers for 750/400 kV Isaccea substation

Name and type of organisation providing to co-operation | Ukraine - ZTZ Zaporozhye Power Transformers Factory

Dates | **1984, 1987**

Principal subjects | Technical consultancy for the Romanian Energy Power Ministry MEE - Industrial Center for Electricity Transmission and Distribution - CIDEE at the factory acceptance testing of 3 pcs. RODT 110 MVAr 750 kV shunt reactors for 750/400 kV Isaccea substation

Name and type of organisation providing to co-operation | **RUSIA** - Moscow ELECTROZAVOD factory

Dates | **1988**

Principal subjects | Technical consultancy for the Romanian Energy Power Ministry MEE - Industrial Center for Electricity Transmission and Distribution - CIDEE at the factory acceptance testing of 2 pcs. current limiting reactors for 750/400 kV Isaccea substation

Name and type of organisation providing to co-operation | Hungary - "Ganz" Budapesta Factory

Personal skills and competences

Mother tongue(s) | **Romanian**

Other language(s)

Self-assessment
European level ()*

English

French

Russian

| Understanding | | | | Speaking | | | | Writing | |
|---------------|------------------|---------|------------------|--------------------|------------------|-------------------|------------------|---------|------------------|
| Listening | | Reading | | Spoken interaction | | Spoken production | | | |
| C1 | Proficient user | C1 | Proficient user | C1 | Proficient user | C1 | Proficient user | C1 | Proficient user |
| B1 | Independent user | B1 | Independent user | B1 | Independent user | B1 | Independent user | B1 | Independent user |
| B1 | Independent user | B1 | Independent user | B1 | Independent user | B1 | Independent user | B1 | Independent user |

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences**Member of professional associations:**

- CIGRE Member (International Council on Large Electric Systems) Paris, since 1991;
- Representative of Romania in the Study Comity no. 12 "Transformers" of CIGRE Paris, during 1992-1998;
- Member within the National Romanian Committee - CNR of CIGRE, since 1991;
- Founding member of the "CNR-CIGRE" Association, since 2006;
- Vice Chairman of the "CNR-CIGRE" Association, since June 2010;
- Member of the CIGRE International Working Group WG A2.34 "Guide for transformer maintenance", since 2007;
- Member of the CIGRE International Specialist Working Group WG 12.17 "Particles in oil" during 1996 -2000;
- Member of The Institute of Electrical and Electronics Engineers – IEEE Society, since July 2010;
- Member in the " National Romanian Committee of the World Energy Council" – CNR- CME since 1990;
- Member of the Romanian National Institute for the Study of Facilities and Usage of Power Sources – IRE, since 1998;
- President of the MEE – RENEL - CONEL Romanian Specialist Group "Transformers and Autotransformers" during 1985 – 1999;
- President of the ICEMENER Specialists Group "Transformers and Autotransformers" during 1999 – 2001;
- Founding member of the Scientific and Technical Association of the Romanian Power Engineers - Energetica – ASTER (taken by IRE).

Organisational skills and competences

Over 20 years of managerial experience regarding all aspects: business, technical, economical, human, etc., in a state-owned company (100%) and respectively, a private-owned company (100%).

Technical skills and competences

1. The Experience accumulated (including the managerial experience) in national/international programs/projects

1.1. "Equipment for complex monitoring of high voltage stations - **EMCSIT**" – Project Director, 19.08.2008-11.06.2011, Contract no. 144/2008 together with the Romanian Ministry of Education, Research and Innovation –INNOVATION Program – Research on the fundamental technical-scientific basis was carried out within the project, and intelligent monitoring equipment were achieved, components of Smart Grid Network such as:

- **NOVA TRAFOMON 5** Equipment for on-line monitoring of power transformers and high voltage shunt reactors;
- **NOVA – SMT** Equipment for the on-line monitoring of high voltage transformer bushings;
- **NOVA EMCSIT - I** Equipment for on-line monitoring of high voltage circuit breakers;
- **NOVA EMCSIT - S** Equipment for on-line monitoring of high voltage disconnectors;
- **NOVA EMCSIT – TC/TT** Equipment for on-line monitoring of high voltage current and/or voltage transformers;
- **NOVA EMCSIT – D** Equipment for on-line monitoring of high voltage surge arresters;

1.2. "Developing an expert system for assessing the condition of high power transformers in operation through RVM method (recovery voltage measurement - RVM)"

Project Director - 24.12.1999 – 30.2.2000 - National Program RELANSIN Subprogram 1 - Contract no. 444/1999 with the Romanian Ministry of Education, Research and Innovation.

An equipment for the diagnosis of the humidity content in transformer insulating system using RVM method has been achieved.

2. **MANAGER / DIRECTOR** for over 250 research and technological engineering projects (within the contracts with the Romanian Energy Power Ministry - MEE, The Romanian Industry Ministry, the Romanian Research and Education Ministry, the Industrial Center for Electricity Transmission and Distribution - CIDEE, the Industrial Center for Power Production – CIPEET RENEL, the Romanian Electricity Authority (RENEL), the Romanian Electric Power Corporation (CONEL), Romanian Power Grid Company “Transelectrica”, SC Hidroelectrica SA, etc..) which dealt with:
- 2.1. Scientific research works** (abstract):
- 2.1.1.** - Developing **NOVA – TRANSPOWER** expert system for for the asset management of the primary high voltage electrical equipment: power transformers and the shunt reactors –**TRANSPOWER - PT** module , current transformers - **TRANSPOWER - TC** -module , voltage transformers - **TRANSPOWER - TT** -module, circuit breakers - **TRANSPOWER - I** – module, disconnectors - **TRANSPOWER - S** -module, surge arresters - **TRANSPOWER - D** -module;
- 2.1.2.** - **NOVA HES – 6** that detects the humidity content in insulating system of power transformers, using 6 methods of diagnosis;
- 2.1.3.** - **NOVA PREDICT** software which determines the optimum conditions for investigating the technical condition of high voltage electrical equipment;
- 2.1.4.** - **WASTE - MANAGER** software system that manages the database for the waste management at CNTEE Transelectrica ;
- 2.1.5.** **POWER CONSTRUCT** software that manages the database for the power constructions of CNTEE Transelectrica;
- 2.1.6.** – Research on the technical-scientific basis and development of some specialized equipment necessary to the electrical engineering such as:
- **NOVA TRAFOMON** (patent in 1995) equipment for the complex on-line monitoring of power transformers in operation;
 - **NOVA SMT** Equipment for the on-line monitoring of high voltage transformer bushings;
 - **NOVA PDC/RVM** equipment for the diagnoses of the humidity content in insulating system of power transformers, using , the polarization and depolarization current measurement (PDC method) and the recovery voltage measurement (RVM method).
 - **NOVA ARF** equipment for the diagnosis of the condition from a mechanical point of view of the power transformer windings by frequency response analysis (ARF method)
 - **NOVA IJT** equipment for the diagnosis of the condition from a mechanical point of view of the power transformer windings by low voltage impulse test (IJT method).
- 2.1.7.**- Studies and researches for developing the **Xb** additive necessary for reducing the polar effect of transformer mineral oil ;
- 2.1.8.** Research on developing the technology of working and coordination for achieving the necessary installations (as a responsible for the project) for on-site drying/revitalization/ regeneration work of medium and large power transformers insulation (contracts with Romanian Power Ministry):
- **RUTI-ETU** oil treatment plant for degassing, dewatering and filtering of transformer oil (rated flow 16 t/h, filtering la 1-5 µm, maximum drying 5 ppm, maximum degassification 0,2 %, maximum heating 100 °C);
 - **RUTI-EVUT** installation for the advanced vacuum of the tank and for capturing through freezing (cryogenic trap) of the vapors (water and light hydrocarbons) extracted from the solid insulation in the drying process;
 - **RUTI-IMIT** installation for heating in direct current of the power transformers (maximum power. 400 kVA, 700 Vdc maximum voltage, 1250 Adc maximum current)
 - **RUTI-IPAU** installation for dry air generating at a dew point under -50 °C.
- 2.1.9.** Research on the lifetime estimation of oil distribution transformers by lightning impulse voltage;
- 2.1.10.** Research on accelerated thermal aging and the thermal lifetime estimation of oil distribution transformers;
- 2.1.11.** Research on theoretical and experimental aspects of partial discharge repeatability measurement and localization of their sources for power transformers;etc.

2.2. Technological engineering works (abstract):

2.2.1. Project Director working on the development of 36 Internal Technical Norms necessary for Romanian Power Grid Company "Transelectrica" (in 2008-2009)

2.2.2. Elaboration of the specific technologies and the technical operative coordination as a Technologist of the working teams for on-site revitalizing/rehabilitation/regeneration rehabilitation works of oil-paper insulation for over 100 power transformers and shunt reactors of rated voltages between 110 kV and 400 kV, such as the transformers of 250/250/80 MVA 400/121/20kV from 400 kV Arad, Medgidia Sud, Constanța Nord, Tulcea Vest, Pelicanu, Gura Ialomiței, Gadalin, Darste, Brașov substations, etc., the autotransformers of 133/133/53 MVA 400/√3/231/√3/22 kV from 400 kV Porțile de Fier substation, the autotransformers of 400/400/160 MVA 400/231/22 kV from 400 kV Slatina, București Sud, Sibiu Sud substations, the autotransformers of 200/200/60 MVA 231/121/10,5 kV from 220 kV Grădiște, Calafat, Cetate, Urechești, Ungheni, Fundeni, Filești, Brazi Vest, Aref, Arad, Timișoara, Reșița, Filești, Florești, Pitești Sud, Alba Iulia, Vetis, substations, etc., generator transformer of 440 MVA 400/24 kV (T01 U2) from Cernavoda nuclear power plant, generator transformer of 250 MVA 15,75/242 kV from Borzești Thermolectric power plant, generator transformer of 240 MVA 15,75/242 kV from Brazi Vest Thermolectric power plant, generator transformers of 190 MVA 15,75/242/15,75 kV from Lotru (T3) and Retezat Hydroelectric power plant, generator transformer of 90 MVA 242/15,75 kV from Sugag (T2) Hydroelectric power plant, generator transformer of 90 MVA 121/10,5 kV from Ruieni Hydroelectric power plant, generator transformer of 80 MVA 123/10,5 kV from Clabucet Hydroelectric power plant, etc..

2.2.3. Expertise the momentary technical state of hundreds of power transformers and shunt reactors in operation such as: all refurbished power transformer before insulation treatment process, 7 autotransformers of 200/200/60 MVA 231/121/10,5 kV from Transelectrica - Bacau subsidiary; 2 generator transformers of 190 MVA 242/15,75 kV belonging to Retezat Hydroelectric power plant; 4 generator transformers of 90 MVA 242/15,75 kV belonging to Sugag and Galceag Hydroelectric power plants, 2 generator transformers of 90 MVA

121/10,5 kV belonging to Ruieni Hydroelectric power plant, 12 transformers of 10-40 MVA 110/MT from ENEL- Dobrogea SA installations; 11 transformers of 16-40 MVA from ELECTRICA SA –Muntenia Sud Subsidiary installations; 6 transformers of 16-40 MVA from ELECTRICA SA - S.C. F.D.F.E.E. "Electrica Transilvania Nord" S.A installations, etc.

2.2.4. Consultancy and technical assistance on evaluations and interpreting the results of tests / analysis / measurements performed in operating power transformers by different service providers.

2.2.5. Consultancy and technical assistance for the reception in the country or abroad of some large power transformers or shunt reactors (for example, reception at Electroputere Craiova of transformers of 440 MVA 24/400 kV and 250/250/80 MVA 400/121/20 kV for Cernavoda Nuclear power plant, reception at the factory from ZTZ Zaporojie – Ukraine of 6 autotransformers of 417/417/80 MVA 750/√3/400/√3/15,75 kV for 750/400 kV Isaccea substation, etc.

2.2.6. Establishing the main technical conditions for producing and testing the power transformers and shunt reactors intended to be installed in the power system; ensuring the quality control on reception from local and foreign suppliers; technical assistance on mounting and commissioning, etc.

2.2.7. Analysis on the behaviour of power transformers in operation; failure analysis; establishing the necessary technical conditions that are to be imposed on service providers and to improve the quality and availability of this type of equipment.

2.2.8. Assessing the risk of commissioning the power transformers where the condition parameters are below the limits allowed by the operating regulations; assessment of the remaining life, etc.

2.2.9. Responsible, performer and technical coordinator from the Romanian side for the verifying works before and post mounting, respectively for commissioning, of 7 pcs. 417/417/80 MVA 750/√3/400/√3/15,75 kV autotransformers and 7 pcs. of 110 MVAr 750 kV shunt reactors in 750/400 kV Isaccea substation.

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| | <p>2.2.10. Specific activities as a member and/or as the leader group of specialists of the Romanian Energy Power Ministry - MEE or Romanian Electricity Authority - RENEL in power transformers' field: analysis of the technical documents of the system designers or equipment suppliers; drawing the beneficiary's views and assisting him in the technical-economical confrontations with the service or equipment suppliers, control to the suppliers for power or distribution transformers and, respectively, shunt reactors during reception phase, mounting or commissioning control of high power transformers or shunt reactors, certificates of technical MEE transformer suppliers, failure analysis, etc.</p> |
| <p>Computer skills and competences</p> | <p>Good user of MS Office package</p> |
| <p>Other skills and competences</p> | |
| <p>Driving licence</p> | <p>B Category</p> |
| <p>Additional information</p> | <p>Presentations / articles in conferences – over 75 international and national presentations</p> <p>1. Author or coauthor to 6 published brochures/technical books.</p> <p>1.1. C. Rajotte (CA), M. Foata (CA), P. Jarman (UK), F. Larese (FR), P. Lorin (CH), B. Pahlavanpour (UK), J.P. Patelli (FR), J. Velek (CZ), R. Willoughby (AU), R. Barrento (PT), P. Boman (US), I. Diaconu (RO), A. Drobyshevski (RU), Y. Ebisawa (JP), T. Fagarasan (RO), N. Fantana (DE), H. Gago (ES), J. Gebauer (DE), P. Gervais (CA), M. Krüger (AT), G. Lawler (IR), R. Maina (IT), C. Moldoveanu (RO), P. Mueller (CH), D. Olan (CA), M. Pena (BR), E. Perez-Moreno (ES), S. Quintin (ES), V. Samoillis (GR), F. Simon (FR), A. Shkolnik (IS), B. Sparling (CA), P. Warczynski (PO) - "<i>Guide for Transformer Maintenance</i>", CIGRE 2010 technical brochure (Final report of WG CIGRE A2.34), 120 pages.</p> <p>1.2. J. Aubin, G.I. Antonov, W. Chunhua, J. Diesendorf, J. Gonzalez, P.V. Goosen, P.N. Jarman, G. Jorendal, C. Krause, C. Boisdon, S. Letaidier, H. Lohmeyer, M. Ikeda, T. Buchacz, C. Moldoveanu, T.I. Morozova, K. Newman, T.V. Oommen, M. Oserwaser, G. Praxl, J.B. Sund, C. Vincent - "<i>Effect of particles on transformer dielectric strength</i>", CIGRE 2000 technical brochure (Final report of WG CIGRE 12.17), 144 pages.</p> <p>1.3. C. Moldoveanu, V. Manitiu, M.R. Marinescu, M. Palici "<i>Fault detection of the internal structure of the power transformers and autotransformers subject to electro-dynamic stress</i>", Technical brochure Published by MEE - ICEMENERG, 1987, 107 pages.</p> <p>1.4. C. Moldoveanu, G. Fischer – "<i>Fault detection via the analysis of the gases dissolved in oil to the power transformers in operation</i>", Technical brochure published by MEE - ICEMENERG, 1987, 106 pages.</p> <p>1.5. C. Moldoveanu, V. Manitiu - "<i>The control of the temporary, accidental or periodical overload capacity of the power transformers subject to electro-dynamic stress</i>", Technical brochure published by MEE - ICEMENERG, 1982, 63 pages.</p> <p>1.6. C. Moldoveanu, G. Balan - "<i>Fault detection in the power transformers coiling via the measurement of the intensity of the partial discharges</i>", Technical brochure published by MEE - ICEMENERG, 1977, 72 pages.</p> <p>2. Author or coauthor of 4 technical reports within the official international contacts:</p> <p>2.1. C. Moldoveanu: "<i>Expert Systems for On and Off - line Monitoring of Large Power Transformers</i>", Scientific report for the Japanese Society for the Promotion of Science, 1995, 72 pages.</p> <p>2.2. C. Moldoveanu, V. Manitiu : "<i>La defectoscopie de la structure interne des transformateurs et autotransformateurs de puissance lors des contraintes électrodynamiques</i>", Scientific report for Electricite de France-DER, 1984, 105 pages.</p> <p>2.3. C. Moldoveanu: "<i>Erreurs possibles dans l'estimation par la methode de la variation de l'impedance de court-circuit, de l'etat des transformateurs de puissance apres court-circuit</i>", Scientific report for Electricite de France_DER, 1981, 13 pages.</p> <p>2.4. C. Moldoveanu, V. Manitiu : "<i>Caracterisation du point de vue thermique de la qualite des transformateurs de distribution dans l'huile</i>", Scientific report for Electricite de France,, 1981, 13 pages.</p> <p>3. Author or coauthor at papers published in periodicals (abstract):</p> <p>3.1. C. Moldoveanu, V. Ursianu, I.Pop, O. Tutuianu – "<i>WasteManager informatic system for the waste evidence and management at the CNTEE Transelectrica subsidiaries level</i>", Energetica, year 54, no. 5/2006, pp. 1-7;</p> <p>3.2. C. Moldoveanu & C. Radu – "<i>The Romanian experience regarding the management risk in the exploitation and maintenance of the high power transformers from the high power substations</i>", Producerea, transportul si distributia energiei electrice si termice, no. 5/2005, pp. 9 -22;</p> |

- 3.3. C. Moldoveanu, C. Pop, V. Ursianu - "HES 4 - expert system for assessing of the humidity in power transformer insulation" *Energetica*, year 53, no. 3/2005, pp. 106-110;
 - 3.4. I. Manea, C. Moldoveanu, I. Ionescu - "Equipment for off-line diagnosis of the medium and high voltage circuit breakers" *The Bulletin of the University of Polytechnics from Iasi*, volume XLVIII (LII) *Electrotechnics, Energy, Electronics*, fasc.5/2002;
 - 3.5. C. Moldoveanu, M. Tocaci, Iv. Moldoveanu, E. Niculescu, D. Tarboiu - "New tendencies regarding the evaluation and improvement of the quality of the insulating oils for transformers", *Producerea, Transportul si Distributia Energiei Electrice si Termice*, no. 2/2001, pp. 3-13;
 - 3.6. C. Moldoveanu, S. Grigorescu, C. Vlaicu - "The complex on-line monitoring of the power transformers from exploitation, using the TRAFOMON equipment" *Producerea, Transportul si Distributia Energiei Electrice si Termice* magazine, year 48, no. 8-9/2000, pp 32-38;
 - 3.7. C. Moldoveanu, V. Manitiu, M.R. Marinescu - "Perfected methods for detecting the distortions occurred in the coils of the power transformers from exploitation" *"Energetica"* magazine, no. 12 B/1997, pp. 539-544;
 - 3.8. C. Moldoveanu, V. Manitiu, M.R. Marinescu - "Solution against the breakdown of the tertiary winding of the 200/200/60 MVA 231/121/10,5 kV power autotransformers to one-line-to-earth short-circuits in 110 kV and 220 kV grids", *"Energetica"* magazine, no. 4 B/1996, pp. 72-180.
 - 3.9. C. Moldoveanu - "Contributions to the development of new, specific devices in Romania for the treatment of the paper-oil insulation from the power transformers in exploitation", *Energetica*, 1991, no. 4 B/1991, pp. 166-172;
 - 3.10. C. Moldoveanu - "Possible errors when evaluating the status of the power transformers after electro dynamical stress using the short-circuit apparent resistance method", *"Energetica"*, 1983, no. 6/1983, pp 289-294.
 - 3.11. C. Moldoveanu - "Comparative analysis of the sensitivity of the main methods for the detection of defects caused by electro-dynamic efforts in the power transformers" *Energetica* magazine, 1981, no. 8, pp 340-352.
 - 3.12. C. Moldoveanu - "Overloading the oil distribution transformers", *Energetica* magazine, 1981, no. 1, pp 39-42.
 - 3.13. C. Moldoveanu, V. Manitiu "The evaluation from the thermal point of view of the quality of the oil distribution transformers" *"Energetica"* magazine, 1980, no. 8, pp 345-349.
 - 3.14. C. Moldoveanu, P. Budasca - "The analysis of the main issues appeared during the partial discharges test of the measuring transformers" *Energetica* magazine, 1975, no.7, pp. 321-327.
 - 3.15. M. Balazs, C. Moldoveanu, Gh. Gavrilă - "Issues regarding the introduction of testing transformers to commutation voltage impulses" *Energetica* magazine, 1973, no. 5-6, pp 179-184.
- 4. Author or coauthor at papers published in International Conference Proceedings** (abstract):
- 4.1. C. Moldoveanu, V. Brezoianu, A. Vasile, V. Ursianu, F. Goni, C. Radu, Ir. Ioniță: "Intelligent System for the On-Line Real Time Monitoring of High Voltage Substations" *Proceeding of International IEEE Conference Innovative Smart Grid Technologies-Europe*, october 11-13, 2010, Gothenburg, Sweden, (Paper No. 2046316)
 - 4.2. C. Moldoveanu, St. Gal, Tr. Fagarasan, V. Ursianu, V. Brezoianu, Ci. Diaconu, M. Oltean, A. Vasile, Ir. Ioniță, V. Zaharescu, G. Moraru "solutions for life management and maintenance optimization for large power transformers" *Proceeding of International Conference on Condition Monitoring and Diagnosis CMD 2010 Tokyo, Japan, September 6 - 11, 2010, ISBN 978-4-88686-070-5, vol. 1, pp. 212-216*
 - 4.3. St. Gal, C. Moldoveanu, R. Bernard, T. Stoenescu, Ir. Ioniță, P. Arnez, C. Matea: "Assessment of electrical and mechanical condition of high voltage transmission lines" *Proceeding of International Conference on Condition Monitoring and Diagnosis CMD 2010 Tokyo, Japan, September 6 - 11, 2010, ISBN 978-4-88686-070-5, vol. 1, pp. 649-653048.*
 - 4.4. C. Moldoveanu, C. Diaconu, R. Ursianu, E. Ursianu, E. Mihalcea, M. Nestor, F. Goni, L. Goia, P. Curiac, V. Ursianu - "Determination of the optimal moments for investigating technical state of primary equipments for the purpose of assuring the safety levels", *Proceeding of International Conference on Condition Monitoring and Diagnosis, CMD 2008, 21-24 April 2008, pp. 601 - 604, IEEE Catalog number; CFP0830D-PRT; ISBN 978-1-4244-1621-9.*
 - 4.5. C. Moldoveanu, C. Diaconu, I. Diaconu - "Experience in assessment and on-site refurbishment of power transformers in service", *Proceeding of CIGRE Session 2008, A2-210 report.*
 - 4.6. C. Moldoveanu, C. Diaconu "On and off-line monitoring of large power transformers - a Romanian experience", *Proceeding of International Conference on Condition Monitoring and Diagnosis CMD 2006 Changwon, Korea, April 2 - 5, 2006, paper 408.*
 - 4.7. C. Moldoveanu, C. Diaconu, C. Pop, V. Ursianu, C. Radu - "Expert systems for condition and maintenance assessment of HV equipment from CN Tranelectrica's substations", *Proceeding of CIGRE Session 2006, Report B3-107.*
 - 4.8. C. Moldoveanu, C. Radu "The Romanian experience regarding the management risk in the exploitation and maintenance of the high power transformers from the high power substations", *Proceeding of CIGRE Session 2004, Report B3-102.*
 - 4.9. C. Moldoveanu "RENEL-Romania: Experience of life assessment and refurbishment of 110 kV, 220 kV and 400 kV power transformers" *Proceedings of Study Committee 12 CIGRE Meeting, Sydney, 1997, paper no. 5.*
 - 4.10. S. Gal, V. Zaharescu, T. Fagarasan, M. Oltean, C. Moldoveanu - "Integrated system of on-line ETG monitoring parameters, part of the Smart Grid development. Case study: ST Sibiu" - *Proc. of 10th Edition of WEC Regional Energy Forum - FOREN 2010, paper S3-22.*
 - 4.11. C. Moldoveanu, S. Gal, V. Brezoianu, V. Ursianu, A. Vasile, D.S. Grigorescu, M. Florea, V. Metiu, V. Zaharescu, A. Moraru, T. Fagarasan, G. Moraru, M. Oltean "On-line monitoring of power transformers and shunt reactor" *Proceeding of International Conference on Industrial Energetics CNEI 2009, ISBN 978-606-527-050-3 pp. 131-139*
 - 4.12. C. Moldoveanu, C. Diaconu, R. Ursianu, M. Florea, V. Ursianu, C. Barbulescu, A. Vasile, C. Florea, F. Goni, S. Diaconu, E. Mihalcea - "NOVA PREDICT expert system for predicting the moment for diagnosis of the technical state and the type maintenance required for high voltage electrical equipment." *Proceeding of International Conference on Industrial Energetics CNEI 2009, ISBN 978-606-527-050-3 pp. 377-385.*

- 4.13. C. Moldoveanu, V. Brezoianu, V. Ursianu, A. Vasile "NOVA QX – Complex power quality monitoring system" .” Proceeding of International Conference on Industrial Energetics CNEI 2009, ISBN 978-606-527-050-3 pp. 393-399
- 4.14. O. Tutuianu, C. Moldoveanu, V. Ursianu, A. Vasile "Implementation of an effective waste management system into the thermal power plants" Proc. of 10th Edition of WEC Regional Energy Forum - FOREN 2008, Neptun, 15-19 June 2008 paper SP 18.
- 4.15. C. Moldoveanu, C. Diaconu, C. Pop, V. Ursianu, C. Ilies, F. Goni "Asset Management and Maintenance of Primary Electrical Equipments from Substations and Power Plants, using Nova TRANSPOWER Expert Systems" Proc. of 10th Edition of WEC Regional Energy Forum - FOREN 2006, Neptun, 11-15 June 2006, paper 1-114.
- 4.16. L. Goia, C. Moldoveanu " Opinions on optimization of the operation of grounding systems in high voltage substations" Proc. of 10th Edition of WEC Regional Energy Forum - FOREN 2006, Neptun, 11-15 June 2006, paper 1-122.
- 4.17. C. Moldoveanu, V. Cochina, B. Petrini, Ir. Moldoveanu, C. Pop, A. Iosup "Expert system for estimating moisture content in power transformers insulation" Proc. of 10th Edition of WEC Regional Energy Forum - FOREN 2004, Neptun, 13-17 June 2004, pp 5-14.
- 4.18. C. Moldoveanu "On/off line monitoring of power transformers", National Energy Conference, 2-5 September, 1996, Neptun, Romania.
- 4.19. C. Moldoveanu s.a. Improved methods for detection of power transformer winding damages in service National Energy Conference, 2-5 September, 1996, Neptun, Romania.
- 5. Author or coauthor at papers published in National Conference Proceedings (abstract):**
- 5.1. C. Moldoveanu, V. Brezoianu, V. Aurelian, V. Ursianu, E. Mihalcea, F. Goni, C. Radu, Ir. Ioniță, S. Zaharescu: "EMCSIT - Intelligent systems for online monitoring of HV substations" Proceedings of International Conference " The intelligent power Grid", Sibiu, Romania, 21 - 23 Septembrie 2010, paper 2.1.
- 5.2. C. Moldoveanu, V. Brezoianu, V. Aurelian, V. Ursianu, M. Avramescu: NOVA QA - intelligent equipment for measurement in class A and online monitoring of power quality " Proceedings of International Conference " The intelligent power Grid", Sibiu, Romania, 21 - 23 Septembrie 2010, paper 2.2.
- 5.3. S. Gal, R. Bernard, C. Moldoveanu, C. Diaconu, C. Matea, T. Stoenescu, P. Arnez, F. Lajovic " Evaluation of the technical condition of 110 – 750 kV overhead power lines and electrical apparatus by helicopter-based multispectral inspections" Proc. of International Symposium on Live Maintenance, Sibiu 2009, 09-11 September;
- 5.4. C. Moldoveanu, V. Ursianu, A. Vasile, O. Tutuianu "Informatics application for waste evidence and management in electricity distribution sector", Proc of the National Power Conference and. Exhibition - CNEE 2009", Sinaia 2009, 21-23 October, ISSN 1843-6005, paper 2.29, pp.311-319;
- 5.5. C. Moldoveanu , I. Diaconu, C. Diaconu "Experience regarding the evaluation of technical condition and on-site revitalization of power transformers ", Proc of the National Symposium on "Power transformers", the third edition, Craiova 2008, 01-03 October;
- 5.6. V. Ursianu, A. Vasile, O. Tutuianu, C. Moldoveanu, D. Bouleanu, C. Motiu, E. Constantin, I. Rentea, "Thermal Power Waste Manager informatic system for waste management in thermal power plants", Proc of the National Power Conference and. Exhibition - CNEE 2007", Sinaia 2007, 21-23 October, ISSN 1843-6005, paper 2.29, pp.311-319;
- 5.7. C. Moldoveanu, C. Diaconu " Modern solutions for the technical condition management of the power transformer in operation", Proc of the National Symposium on "Optimization of the Energetic Services", Buzau 2007, 23-25 October;
- 5.8. C. Moldoveanu, C. Diaconu " Modern and efficient solutions for on-site regeneration of power transformer insulation", Proc of the National Symposium on "Optimization of the Energetic Services", Buzau 2007, 23-25 October;
- 5.9. C. Moldoveanu "New conditions for the evaluation of real technical statement of power transformers in service", Proc of the National Symposium on "Optimization of the Energetic Services", Buzau 2007, 23-25 October;
- 5.10. C. Moldoveanu, C. Diaconu, C. Pop, V. Ursianu "Modern solutions for the technical condition and maintenance management of the power transformer in service", Proc of the National Symposium on "Materials, products and new maintenance techniques" AQUA NOSTRA & HIDROELECTRICA SA, Sinaia 2006, 28-29 April;
- 5.11. C. Moldoveanu, C. Pop, V. Ursianu, C. Ilies, C. Diaconu: "Expert system for diagnosis and maintenance optimization of power transformer in service", Proc of the National Symposium on "Optimization of the Energetic Services", Buzau 2005, 25-26 October, pp. 163-180;
- 5.12. C. Moldoveanu, C. Pop, V. Ursianu, C. Ilies: "Evaluation of water content and of remnant life of power transformer in service" ", Proc of the National Symposium on "Optimization of the Energetic Services", Buzau 2005, 25-26 October, pp. 181-198.
- 5.13. C. Moldoveanu, C. Pop, B. Petrini, Ir. Moldoveanu, V. Cochina, A. Iosup "HES - Expert system for humidity assessment of power transformer insulation" Proc of the National Symposium of „Artificial Intelligence Systems in Electro energetic”, Galati 2004, 29-30 September;
- 5.14. C. Moldoveanu, Ir. Moldoveanu, C. Pop, B. Petrini, C. Radu, M. Nestor, C. Diaconu ""Transpower" – informatic system for diagnosis and maintenance of power transformer in operation" , Proc of the National Symposium of „Artificial Intelligence Systems in Electro energetic”, Galati 2004, 29-30 September;
- 5.15. C. Moldoveanu "15 years of practical experience referring to insulation refurbishment of large power transformers applying the "thermo-vacuum" complex variant", Proc of the International Symposium of CN Transelectrica "Power Transformers", Predeal 2004, 29-30 September;
- 5.16. C. Moldoveanu, Ir. Moldoveanu, C. Pop, B. Petrini, C. Radu, M. Nestor, C. Diaconu - ""TRANSPOWER"- an informatic system designated for diagnosis and maintenance of power transformers in operation" Proc of the International Symposium of CN Transelectrica "Power Transformers", Predeal 2004, 29-30 September;

- 5.17. C. Pop, V. Cochina, C. Moldoveanu, C. Radu, M. Nestor - "*Bar cod utilization in the maintenance activities for power transformers in service*" Proc of the International Symposium of CN Transelectrica "Power Transformers", Predeal 2004, 29-30 September;
- 5.18. C. Pop, V. Cochina, Ir. Moldoveanu, C. Moldoveanu, M. Ilie ""*Waste Manager*" *an informatic system for evidence and inventory of the wastes at the Transelectrica subsidiary level*", Proc of the CN "Transelectrica" SA Symposium on "Durable development of the electrical transport network", Curtea de Arges 2004, Romania, 23-24 September;
- 5.19. C. Moldoveanu "*Management of risk in the exploitation and maintenance of the power transformers in service*" Proc of the National Symposium on "Electric Networks" - SNRE, Baile Felix 2002;
- 5.20. C. Moldoveanu "*New technical solutions for prolonging the lifetime of power transformers in service*" Proc. of the National Symposium on "Electric Networks" - SNRE, Baile Felix 2002, ;
- 5.21. C. Moldoveanu, M. Tocaci, E. Niculescu, D. Tarboiu, Iv. Moldoveanu "*New tendencies regarding the evaluation and improvement of the insulating oils for the transformers*" Proc. of the National Symposium on "Electric Networks" - SNRE, Iasi 2000, volume 1, pp. 676 - 687.
- 5.22. C. Moldoveanu "*The complex on-line monitoring of the power transformers in operation, using the TRAFOMON equipment*" Proc. of the National Symposium on "Electric Networks" - SNRE, Iasi 2000, volume 1, pp. 687 – 696
- 5.23. C. Moldoveanu: "*On/off line monitoring of power transformers*, Proceedings of the National Symposium on Electric networks - SNRE ,1996, Cluj, pp 258-263.
- 5.24. C. Moldoveanu: "*Solution for the reparation of the 200/400 kV autotransformers from the Portile de Fier 1 substation*", International meeting dedicated to the 35-th anniversary of ICEMENERG, 4-5 May, 1995, Bucharest, Romania.
- 5.25. C. Moldoveanu, C. Radu, V. Grigoriu, V. Rosca: *Solution against the failure of the tertiary winding of the 200/200/60 MVA 231/121/10,5 kV power autotransformers to one-line-to-earth short-circuits in 110 kV and 220 kV nets*", "Extra High Voltage Networks" International meeting, 31 May-3 June, 1995, Sibiu, Romania.Proc. of Very High Voltage Networks Symposium", pp. 100 - 116
- 5.26. C. Moldoveanu: "*Using the new, sensitive methods destined to evaluate the state of the state of the winding of the transformers and autotransformers subject to electro-dynamic stress*", Meeting regarding the Behavior in exploitation of the Power network, 1983, Iasi, Romania.
- 5.27. C. Moldoveanu: "*Fault detection methods of the state of the power transformer subject to short-circuits*", Meeting regarding the Behavior in exploitation of the power network, 1982, Cluj, Romania, organize by MEE-CIRE + CIPEET.
- 5.28. Moldoveanu, C., Oneț, A., Gavrilă, G. "*Test results of distribution transformers with repeated lightning chopped impulses Meeting regarding "Protection of electrical installation against overvoltages"*", organized by MEE-CIRE-CNIT, Piatra Neamț, 20-21 aprilie 1978. Meeting regarding the Behavior in exploitation of the power network, 1982, Cluj, Romania.
- 5.29. Moldoveanu C. "*The measurement partial discharges at power transformers in operation*" Meeting regarding the behavior in exploitation of the high voltage electrical equipment, 1977, September, Mamaia, Romania, organized by MEE-CIRE + CIPEET.
- 5.30. Moldoveanu C. "*The attenuation of partial discharge signals depending of constructive particularities of power transformer and the place of their source*" Meeting Scientific Communication Session organized of ICEMENERG – IRME in October 1973, Bucharest, Romania;

6 Author or coauthor on 6 inventions (patent certificate in Romania) and 4 innovations (certificated).