

◇ Date personale

MANDRESCU CORNELIU

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◇ Activitate profesionala

• *Doctorat*

- **Institutie:** Universitatea din Petrosani
- **Domeniu:** Electromecanica
- **Conducator stiintific :** Prof.dr.ing. PROFIR DEGERATU
- **Titlu:** „Automatizarea complexelor mecanizate de abataj”

• *Societati stiintifice sau profesionale*

- Membru al Societății Române de Automatică și Informatică Tehnică (SRAIT) filiala Petrosani
- Membru al Asociației Generale a Inginerilor din Romania (AGIR)

• *Cursuri/Laboratoare*

- **Titular de curs la disciplinele:**
 - Identificarea sistemelor
 - Tehnici de optimizare
 - Ingineria sistemelor automate
 - Sisteme de conducere a proceselor
 - Automatizari industriale

• *Manuale publicate*

- Pătrășcoiu N., Mândrescu C. - **Senzori și traductoare**, Editura Focus, Petroșani, 2000
- Mândrescu C., Pătrășcoiu N. - **Sisteme de conducere a proceselor**, Editura Universitas, Petroșani, 2000
- Mândrescu C. – **Automatizarea complexelor mecanizate de abataj**, Editura Universitas, Petroșani, 2001

◇ Cercetare

• *Granturi, contracte de cercetare*

- **Invertor orientat software pentru conducerea inteligenta a actionarilor electrice cu motor de inductie.** Membru. Grant CNCSIS nr. 1067 / 2002.
- **Invertor orientat software pentru conducerea inteligenta a actionarilor electrice cu motor de inductie.** Membru. Grant CNCSIS nr. 74 / 2003.
- **Sistem de comandă vectorială cu DSP pentru sisteme de acționare cu motoare de inducție din gama 10-500 kVA – partea de hard.** Director contract. Contract nr 5/2005 cu SC INDAELTRAC SA Craiova.
- **Sistem de comandă vectorială cu DSP pentru sisteme de acționare cu motoare de inducție din gama 10-500 kVA –**

partea de soft. Director contract. Contract nr 5/2005 cu SC INDAELTRAC SA Craiova.

- **Articole publicate**

- C.Mandrescu, O.Stoicuta - **"Analysis of the Luemberger Extended Estimator used within a Vectorial type Electrical Driving System with an Induction Motor"**, - Annals of the University of Petrosani, Electrical Engineering, vol.9; Petrosani, Romania; 2007;
- C. Mandrescu, O.Stoicuta - **"Synthesis of the Luemberger Extended Estimator used within a Vectorial type Electrical Driving System with an Induction Motor"**, - Annals of the University of Petrosani, Electrical Engineering, vol.9; Petrosani, Romania; 2007;
- C.Mandrescu, O.Stoicuta - **"Comparative Study from the Kalman Filter's Stability Point of view and the Luenberger Estimator within a Vectorial Control System in which the Luenberger Estimator is Projected on Self Value Rotary Based Method"**, - Annals of the University of Petrosani, Electrical Engineering, vol.8; Petrosani, Romania; 2006;
- C.Mandrescu, O.Stoicuta - **"Vectorial Control System with Sensor Speed Measurement of the Induction Motors"**, - Annals of the University of Petrosani, Electrical Engineering, vol.7; Petrosani, Romania; 2005;
- C. Mandrescu, O.Stoicuta - **"Vectorial Control System for Sensorless Speed Measurement of the Induction Motors"**, - Annals of the University of Petrosani, Electrical Engineering, vol.7; Petrosani, Romania 2005;
- Mandrescu C., Stoicuta O., Matei A., Badulescu C. - **"The Using of Neuro - Fuzzy Command in the Decantation Process"**, - In proceedings of the International Conference on Environment and Mineral Processing, Part I; Ostrava,Czech Republic 2008;
- Mandrescu C., Matei A., Stoicuta O., Stoicoiu I. - **"Utilization of the Neuro - Fuzzy Regulator for Automation of Fermentation Reaction Vessel for Penicillin Product"**, - In proceedings of the International Conference on Environment and Mineral Processing, Part I; Ostrava,Czech Republic 2008;
- Mandrescu C., Matei A., Toderas M., Stoicuta O. - **"Utilization of the fuzzy regulator for automation of the fermentationh reaction vessel for biological gas"**, - In proceedings of the International Conference on Environment and Mineral Processing, Part III; Ostrava,Czech Republic; 2007;
- Mandrescu C., Matei A., Stoicuta O., Moraru M. - **"The using of fuzzy command in the decantation process"**, - In proceedings of the International Conference on Environment and Mineral Processing, Part III; Ostrava,Czech Republic, 2007;
- Badulescu C.,Toderas M., Matei A., Mandrescu C. - **"The sludge - between industrial waste and raw material"** , - In

- proceedings of the International Conference on Environment and Mineral Processing, Part III; Ostrava, Czech Republic; 2007;
- Corneliu Mandrescu, Olimpiu Stoicuta, Aronel Matei - **“Utilization of Fuzzy regulators for driving anaerobic fermentation tanks”**, – In proceedings of the International Conference MINING, GEOLOGY AND ENVIRONMENT IN SLOVAKIA AND THE EUROPEAN UNION, Demänovská Dolina - Slovak Republic, 2007;
 - Corneliu Mandrescu, Olimpiu Stoicuta, Aronel Matei, **“The fuzzy at the installation for the treatment of the residual waters effluents of the Jiu Valley- Romania”**, In proceedings of the International Conference MINING, GEOLOGY AND ENVIRONMENT IN SLOVAKIA AND THE EUROPEAN UNION, Demänovská Dolina - Slovak Republic, 2006;
 - Stoicuta O., Mandrescu C., - **„Real-time simulation of the extended Luenberger Estimator using the eZdps 2812 Development Kit”** – In proceedings of the International Conference on Automation, Quality and Testing, Robotics (AQTR 2006), 15th EDITION, Cluj – Napoca, Romania, 2006;
 - Mandrescu C., Stoicuta O., - **„Stability Study on Speed Estimator MRAS used within Sensorless Vector Driving Systems with Induction Motors”**, – In proceedings of the International Conference on Automation, Quality and Testing, Robotics (AQTR 2006), 15th EDITION, Cluj – Napoca, Romania, 2006;
 - C.Mandrescu, O.Stoicuta - **“Stability Analysis of the Direct Field Oriented Control System of the Induction Motor”**, – In proceedings of the International Conference on Control Systems and Computer Science (CSCS – 15, 2005), 15th EDITION; Bucuresti, Romania, 2005;
 - Mândrescu C., Stoicuța O., **„Reduced order Kalman filter and extended Kalman filter implementation using S_Function blocks from Matlab-Simulink”** publicată în *Lucrările Științifice ale Simpozionului Internațional UNIVERSITARIA SIMPRO 2005*, Petroșani, vol. Automatica, Informatica Aplicata si Calculatoare;
 - Stoicuta O., Mandrescu C., **„ Stability analysis in the low speed region of direct field oriented control system of the induction motor”**, publicată în *Lucrările Științifice ale Simpozionului Internațional UNIVERSITARIA SIMPRO 2005*, Petroșani, vol. Automatica, Informatica aplicata si Calculatoare, 2005.

◆ Alte activitati

- Responsabil curs postuniversitar de scurtă durată, specializarea *Informatică industrială*
- Membru Centru de Cercetare tip C, acreditat CNCSIS, “Metode, tehnici si software pentru conducerea inteligenta a actionarilor electrice cu motor asincron cu aplicatii in minerit”, Universitatea din Petrosani