CURRICULUM VITAE

Octavian Dan Capatina

personal site www.itc-cluj.ro/

1. **Born:** 1948, April, 17th in Sibiu, Romania
2. **Address:** Cluj-Napoca, str. Titulescu 165, o.capa@yahoo.com, oct.capa@gmail.com
3. **Graduate:** Technical University of Bucharest,. Electronics and Telecommunication. Department. -1971
4 **Specialized**: design with µprocessor and µcontrollers, renewable energies
5. Authorized designer for electrical network under 1000Vac
6. **Positions held:**
   - "Unirea –Napomar", Institute Cercetare Proiectare MUA 1971-1974, engineer
   - "Computer Technical Institute", 1974-1996, researcher, 1996-2000 branch manager
   - Romanian Parliament, deputy, 1990-1992
   - "Astral-Telecom", branch Cluj, 2000 - 2006, executive manager,
   - IPA SA (automation institute), researcher 2006 -
7. **Scientific activity**:

Patents:

- Generator polifazic si dispozitiv de com. pentru motoare pas cu pas (Polyphasic generator for step motors), nr.70410/1979
- Generator de 2 frecv.intr-un raport dat (Two frequencies in a given ratio generator), nr 77738/1981
- Dispozitiv electronic de comanda a motoarelor pas cu pas (Electronic module for step motor command), nr 98301/1989

Books:

- Proiectarea cu microprocesoare (Designing with microprocessor), Ed.Dacia 1983

- Proiectarea cu microcalculatoare integrate (Designing with microcomputer one chip), Dacia, 1993

Articles in refereed journals

- *Bloc de afişare pe tub catodic* (Display module on CRT) –E.E.A. anul 23, nr. 4 dec.1979
- *Trasoare digitale* (Plotters) – A.M.C. nr 37/1983
- *Arhitectura unităţilor de comanda a roboţilor industriali UCR* (Structure of Command module of industrial robots – UCR) -E.E.A. anul 32, nr3 aug 1988

Other papers

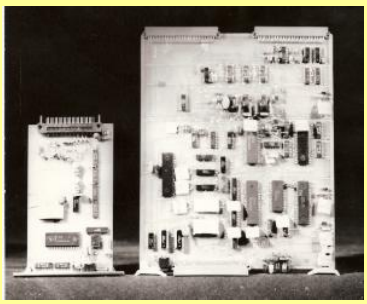
- *Hardware Structure of a Robot Command Unit*, 31st Conference Jurema Zagreb 1987
- *Multiprocessor Hierarchical System for Industrial Robots*, SAI - 7 Bucharest. mai 1987
- *The Motion Control Module as a Part of a 2 Levels*, Structure of a Robot Command.- Sofia 1987
- Hydro-eolian energetical ensamble, IFAC, ICPS'07 iul 2007, Cluj-Napoca
- Aspects of an Expert System on line Eolian Sites Design, IFAC, ICPS'07 iul 2007, Cluj-Napoca
- Wind potential determination in a known area , IEEE AQTR, 22-25 may 2008, Cluj-Napoca
- Large wind integration in an electrical national system , Dewek, nov. 2008, Bremen,

- About wind in Romania , SEE, 29-30 Jan.. 2009, Istambul,
- Photovoltaic Farms - today challenge, Revista romana de automatica, vol XXII, iulie 2009
- The Funnel Effect in Wind Application, IEEE AQTR, 28-30 may 2010, Cluj-Napoca
- A new approuch of the energy system, Energetica, vol 59, ISSN 1453-2360, nr11/2011 Bucuresti
- One Holistic Vision of the Future Energy Systems, IJEE, Apr . 2013, Vol.3 Iss. 2,

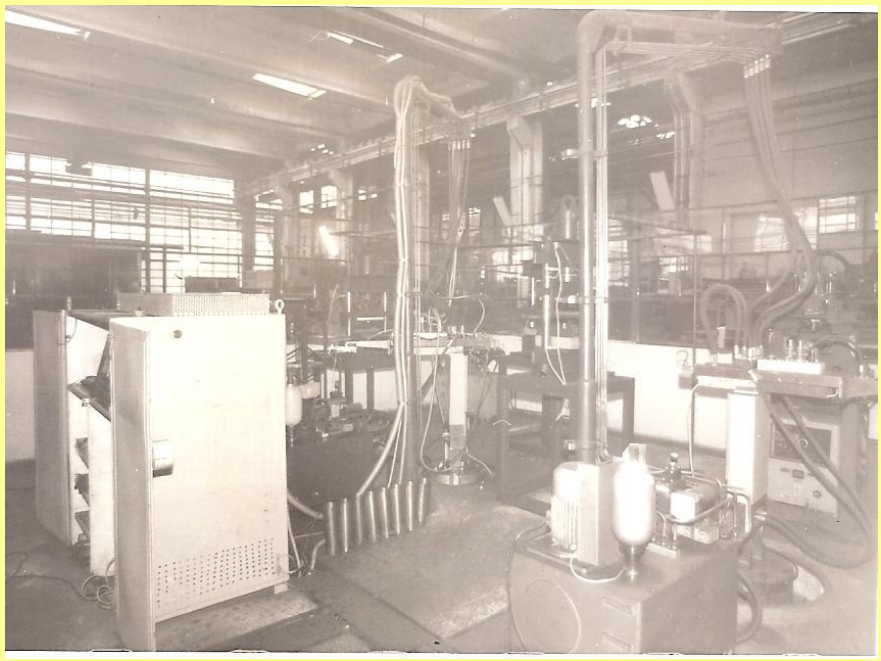
8. **Technical achievments:**

- SMP80 - first Romanian **computer with microprocessor** – realized in the early 1976 at ITC (Computer Research Institute), in Cluj Napoca.

- MD-10 - first Romanian **Plotter**, - 1980/81 designed for mass production at IEPER (Company for computer periphery equipment) Bucharest



- **Technological development** in 1986/87: swept from µprocessor to µcontrollers 1988 for industrial applications

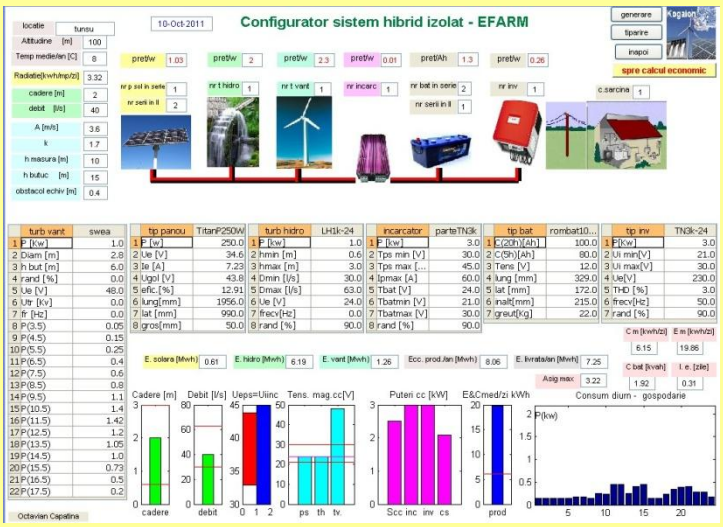


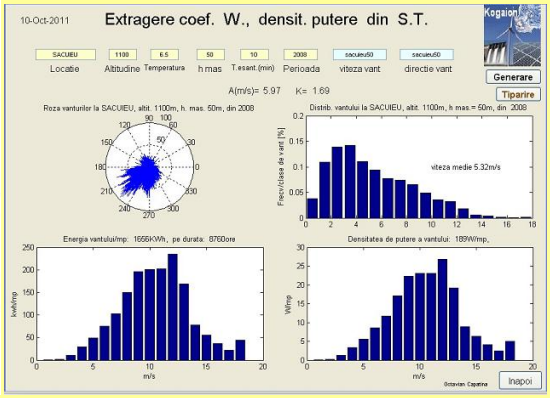
Command unit for production flexible cell (3 robots and 2 press machines) – 1986, at Tehnofrig company Cluj-Napoca. This production cell was included in the technological production line of bottling machine exported in China.

- Set up of a **development kit** (technology hard and soft), for Z86C95 microprocessor with DSP -1996

Set up a **hybrid solar-eolian pilot**

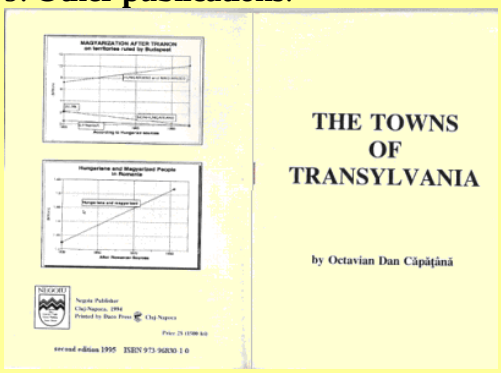
A small renewable hybrid system (o,5Kw photovoltaic panels and 1,5Kw wind turbine, 48Vdc 180Ah accumulators and 4kw inverter with an own made SCADA system) for research purposes was set up in 2009, near Cluj Napoca. The monitoring SCADA system was based on Siemens PLC CPU224Xp. The current measurements are based on LEM LA25-P sensors. The anemometer is based on NRG#40 sensor. The data transmission are over an VPN GSM/GPRS connection.





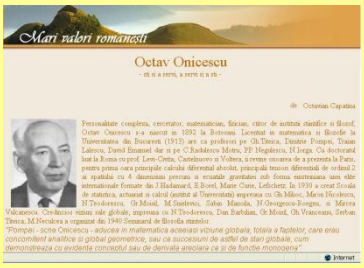
”**Kogaion v1.08**”- an application software for design, development and assessment of wind, solar and hybrid projects. Kogaion consists of a number of modules, each of which has its special purpose. The user has many possibilities the use all the data type known, to compare one turbine in many places, to compare the results of two turbines in one place, to compare up to four turbines one to another, to extract the power/speed curve and so on. For small projects there is a special module that structures a solar, hydro and wind hybrid project. Another special module refers to wind energy conservation by water pumping into upper lake. Other feature refers to economical approaches (Cost, venue, NPV, IRR, payback etc). A Matlab base application software for Wind locations assessment, Energy yield and Wind energy conservation through pumps

9. **Other publications**:

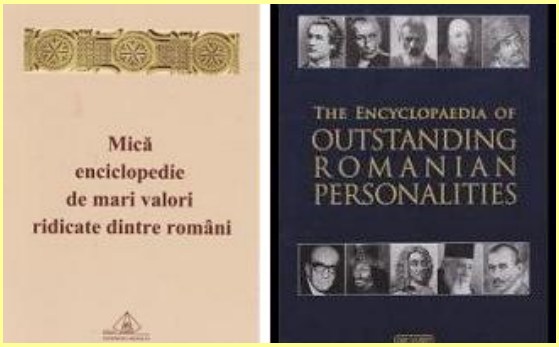


In this book **"The Towns of Transylvania"** are presented: the programmatic means by which the minority dominated, the results of this programmatic politics in the towns, who set up communism in Transylvania, how was set up communism in Transylvania.

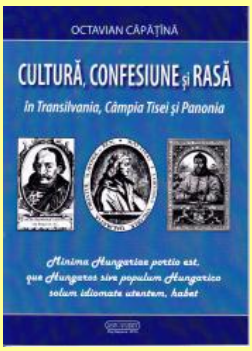
In these publications "**Romania absurda**" and "**Romania absurda, Romania creatorilor**" are presented: the crude reality of Romanian society in the post communism era, the corrupted political class and its cowardice
In the second publication (1999) was described a new concept for society future development named "Romania creatorikor"



"**Mari Valori Romanesti**" – is a large cultural project about great values belonging to our cultural space, on virtual space http://creatori.ro . The project was supported by many other academic authors.



Mica Enciclopedie de mari valori ridicate dintre romani - a book about the Romanian great personalities published with other scientist, in May 2011, and his english version *The Enciclopaedia of Oustanding Romanian Personalities*, published in May 2013.



Cultura, confesiune şi rasă în Transilvania, Câmpia Tisei şi Panonia (Culture, confession and race in Transylvania, Tisa Plain and Panonia) gather German and Romanian information on the most exciting historical process – the domination of a minority over most educated and civilization majorities. It was published in February 2014.

Octavian Capatina, October 2014, Cluj-Napoca