

## List of works - Prof.univ.dr.ing.ec. IONEL BARBU

### Field of Industrial Engineering

#### International Projects – 1

MADETEXTIL- 171E/12.09.2008, Textile waste management, Ministerul Educației și Cercetării, PROGRAM INOVARE, **PROIECT EUREKA**, A. Popa, A. Bucevschi, E. Airinei, **Ionel Barbu, team member, 40000 RON**

#### National grants - 5 - all director

1. 3034a / 1994, Optimization of process parameters and factors of influence in obtaining clothing fabric bound - Barbu Ionel, s.a. - Ministerul Învățământului și Științei, 600000 lei, **project manager**
2. 3034 c/ 1994, Improved dimensional stability of knitted fabrics from cotton yarn and cotton type - Barbu Ionel, s.a. - Ministerul Învățământului și Științei, 400000 lei, **project manager**
3. 2212/1999 - Theoretical Aspects of cotton-type yarn processing operations of spinning preparation - **Barbu Ionel** s.a. **ANSTI-Poziția 14 anexa 2 actul adițional 737/19.08.1999/V** - with Institutul de Cercetări Textile București, 5 mil.lei, **project manager**
4. 3587/2000 - Guidelines for developing type cotton fiber processing stage II - lap, rotor spinning machine - **Barbu Ionel** s.a. **ANSTI** with Institutul de Cercetări Textile București, 8 mil. lei **project manager**
5. 533/2000 - Develop handbook for fiber processing type cotton stage I - Combing machines, flyer, ring spinning machine - **Barbu Ionel** s.a. **ANSTI** 133/2000 with Institutul de Cercetări Textile București 7 mil. lei **project manager**

#### PNCDI projects - 15 of which 3 project manager

1. RO/99/PL 83501/I.1.2.c - Exchange of formers for application of informatics in textiles - Ciocoiu Mihai, **Barbu Ionel**, ș.a. - **LEONARDO** project Exchange of formers for application of informatics in textiles - March- April 1999, Pireu - Grecia, 8400 Euro, team member
2. Developing technologies to achieve ecological textiles - Cârpuș Eftalea, **Barbu Ionel**, ș.a. - **ANSTI**, 30 mil.lei, team member
3. 245/II/2000 Trainers exchanges for reengineering of business processes for small and medium sizes companies - M. Ciocoiu, **Barbu Ionel - Phare - project** - 2000, team member
4. 02-3-PED-443 / 2002 - Development of biotechnology textile processing of natural fibers to reduce pollution - **Barbu Ionel**, s.a. - **PROIECT BIOTECH**, oct. 2002 - dec. 2004, team member
5. 240/oct.2003 - High performance textile product used in aeronautics, Ministerul Educației și Cercetării, **PNCDI, Program INVENT**, A. Bucevschi, A. Popa, E. Airinei, **I. Barbu**, team member, 109 mil.lei
6. 356/26.09.2003 - Development of flexible systems, environmental, textile waste processing classics, Ministerul Educației și Cercetării, **PNCDI, Program MENER, I. Barbu**, A. Bucevschi, A. Popa, E. Airinei, **project manager, 42,7 mil.lei**
7. 356/26.09.2003 - Flexible systems, ecological correlation, collection, storage and processing of leather and textile waste (material recovered)- **Barbu Ionel**, s.a. - **PROIECT MENER**, Oct 2003 - 2005, **project manager**
8. 239/2003 - Inflatable modular system for simulating naval battle tactics - **Barbu Ionel**, s.a. - **PROIECT INVENT**, Oct 2003-2005, team member, 109 mil.lei
9. 2104/2004 - Elastic bandages for postoperative recovery, Ministerul Educației și Cercetării, **PNCDI, Program RELANSIN**, A. Popa, **I. Barbu**, A. Bucevschi, E. Airinei, team member, 15 mil. lei
10. 149/30.09.2004 - Elastomer composite biomaterials for orthopedics content, Ministerul Educației și Cercetării, **PNCDI, Program INVENT**, A. Popa, E. Airinei, **I. Barbu**, A. Bucevschi, team member, 40 mil.lei
11. 184/12.12.2005, Woven structure for filtering liquids and cooling lubricating mechanical, Ministerul Educației și Cercetării, **PNCDI, Proiect INVENT**, A. Popa, E. Airinei, **I. Barbu**, A. Bucevschi, team member, 20 mii RON

12. 716/24.07.2006 - Waste processing technologies competitive textile and leather products with high added value, Ministerul Educației și Cercetării, **PNCDI, Proiect CeEx**, A. Popa, E. Airinei, **I. Barbu**, A. Bucevschi, M. Pustianu, team member, 102500 RON

13. 145/20.07.2006 - Smart textile - convergent platform for identifying and personalized mobile information processing, Ministerul Educației și Cercetării, **PNCDI, Proiect CEEX**, A. Popa, **I. Barbu**, A. Bucevschi, E. Airinei, team member, 94018 RON

14. 34/201165/30.03.2006 - Systems increase the level of environmental protection in textiles, leather, Ministerul Educației și Cercetării, **PNCDI, Proiect PROGRAM SECTORIAL**, 20062008, A. Popa, **I. Barbu**, A. Bucevschi, E. Airinei, M. Fogorasi, team member, 20000 RON

### **Contract research / consultancy environment - 2 of which 1 project manager**

1. 186/1997, Study on the rehabilitation ward spinning SC TEBA S.A. Arad, S.C. TEBA S.A. Arad, **Barbu Ionel, project manager**

2. 182/1997, Investigation of industry interest in the west for research works, Comisia Teritorială Interdisciplinară pentru Cercetare Dezvoltare - Zona de Vest, Timișoara, **Barbu Ionel**, team member

### **Books, university books, collections of problems, etc.. published in publishing, no. ISBN - 14 of which 8 first author**

1. Cotton spinning - machines and processes - **ISBN 973-97828-2-5, Barbu Ionel**, Bucevschi Adina, ș.a. Editura Universității Aurel Vlaicu Arad, 1997, 420 pag;

2. Computer aided design technology in spinning cotton - Volume I - Design blends the spinning of cotton-type fibers **ISBN 973-9361-01-3; 973-9361-02-1**- Ciocoiu Mihai, **Barbu Ionel**, Oniță Aurel, Ed."Universității Aurel Vlaicu" , **Arad**, 1998, 124pag;

3. Computer aided design technology in spinning cotton - Volume II - Design technologies for cotton type yarns **ISBN 973-9361-01-3; 973-9361-03-X** - Ciocoiu Mihai, **Barbu Ionel**, Oniță Aurel, Ed."Universității Aurel Vlaicu" , **Arad**, 1998, 162 pag;

4. Synthesis license exam at the spec spinning - weaving, Volume I - General Discipline, **ISBN 973-9361-23-4; ISBN 973-9361-24-2** - **Barbu Ionel** ș.a.Ed."Universității Aurel Vlaicu", **Arad**, 1999, 162 pag;

5. Synthesis license exam at the spec spinning - weaving, Vol II – Specialty Discipline, **ISBN 973-9361-23-4, ISBN 973-9361-28-5** - **Barbu Ionel** ș.a. Ed."Universității Aurel Vlaicu", **Arad**, 1999, 324 pag;

6. Technological design cotton spinning, **ISBN 973-585-131-8** - **Barbu Ionel**, Editura Mirton **Timișoara**, 2000, 222 pag;

7. Fundamentals spinning processes - **ISBN 973-585-291-8** - **Barbu Ionel**, Vâlcu Cătălin, Editura Mirton **Timișoara**, 2000, 180 pag;

8. Cotton spinning - machines and processes - vol I, **ISBN 973-585-536-4; 973-585-537-2** - **Barbu Ionel**, Zoica Gelu, Bucevschi A. Editura Mirton Timișoara, 2001, 210 pag;

9. Cotton spinning - machines and processes - vol II, **ISBN 973-585-536-4; 973-585-538-0** - **Barbu Ionel**, Zoica Gelu, Bucevschi A. - Editura Mirton Timișoara, 2001, 186 pag;

10. Fundamentals spinning processes – the second edition **ISBN 973-585-796-0** - **Barbu Ionel**, Vâlcu Cătălin, Editura Mirton **Timișoara**, 2002, 180 pag;

11. Computer Aided Engineering Textile Technology, **ISBN 973-8075-28-9**, Mihai Ciocoiu, **Barbu Ionel**, ș.a. Editura Performantica, Iași, 2002, 289 pag

12. Computer aided design technology in spinning and weaving - **ISBN 973-8075-82-3**, D.Cașcaval, M.Ciocoiu, **Barbu Ionel**, s.a., Editura Performantica Iași, 2003, 150 pag;

13. Textile Engineering - Diploma exam topics, **ISBN 973-661-585-5**, A.Bucevschi, **Barbu Ionel**, s.a., Editura Mirton Timișoara, 2005, 216 pag

14. Mining and processing technologies cotton-type fibers - Carpus Eftalea, Drambei Petronela, Scarlat Razvan, Popa Alexandru, **Barbu Ionel**, Adina Bucevschi, Editura Certex, București, 2005

**Works published abroad in magazines / journals indexed, anals, newsletters  
academic and scientific international conference volume - 24 of the 18 first author**

1. Teljesitmenyek es perspektivak a pamutfonoda gepeinek teruleten I. resz - **Barbu Ionel**, Magyar Textiltechnika - **Budapest, Ungaria**, Nr. 1/1999, pag 11-14
2. Computer Aided Technological Design of Cotton and Cotton Like Fibre Blends - **Barbu Ionel**, Ciocoiu Mihai - **Leonardo** project RO/99/PL 83501/I.1.2.c - Exchange of formers for aplication of informatics in textile - Martie-Aprilie 1999, **Pireu - Grecia**, pag. 5-22
3. Computer Aided Technological Design of the Spinning Technologies in the Cotton Like Spinning Mill - **Barbu Ionel**, Ciocoiu Mihai - **Leonardo** project RO/99/PL 83501/I.1.2.c - Exchange of formers for aplication of informatics in textile - Martie-Aprilie 1999, **Pireu - Grecia**, pag. 37-50
4. Computerized Cotton Spinning Mill - **Barbu Ionel**, Ciocoiu Mihai, **Yehia Mogahzy SUA** - 3<sup>th</sup> International Conference on New products and Production Technologies for a New Textile Industry - Poster ,1-2 July 1999, pag. 355, **Gent - Belgia**
5. Pamut tipusu fonalak fonasanak szamitogepes technologia tervezese - **Barbu Ionel** - 7<sup>th</sup> International Conference on Textile Raw Materials, 18-19 May 1999, **Budapest, Ungaria**
6. The mathematical modeling of the draft technological process, when realizing cotton and polyester yarns - Cira Octavian, **Barbu Ionel**, Clepcea Adrian - Pannonian Applied Mathematical Meetings - PC - 125, 13-16 May 1999, **Balaton, Ungaria**
7. Program for the calculation of cotton type blends characteristics - **Barbu Ionel**, Mihai Ciocoiu, Aurel Oniță, Pannonian Applied Mathematical Meetings - PC - 125, 13-16 May 1999, **Balaton, Ungaria**
8. Teljesitmenyek es perspektivak a pamut es pamutjelegu szalak fonasanak teruleten - **Barbu Ionel** - Magyar Textiltechnika - **Budapest, Ungaria**, nr.1/2000, pag. 38-40
9. The optimization of the carding technologic parameters - **Barbu Ionel**, Mihai Ciocoiu ș.a. - Pannonian Applied Mathematical Meetings - PC - 128, april 2000, pag. 87-92, **God, Ungaria**
10. The Influence of the technologic parameters at the unconventional rotor spinning mill OE on the yarns characteristics - **Barbu Ionel**, Mihai Ciocoiu ș.a. - Pannonian Applied Mathematical Meetings - PC - 128, april 2000, pag. 93-100, **God, Ungaria**
11. The projecting program for tricomponent blending tricomp - **Barbu Ionel**, Mihai Ciocoiu ș.a. - Pannonian Applied Mathematical Meetings - PC - 125, June 2000, pag. 109-118, **Balatonalmadi, Ungaria**
12. Modeling multiple components blends - **Yehia Mogahzy, SUA, Barbu Ionel** - 4<sup>th</sup> International Conference TEXSCI 2000, **Liberec, Cehia**, 12-14 June, Proceedings pag.65 - lucrare prezentată în plenul conferinței
13. Stattex - the program for experimental data processing - **Barbu Ionel**, Mihai Ciocoiu - 4<sup>th</sup> International Conference TEXSCI 2000, **Liberec, Cehia**, 12-14 June, Proceedings pag.341 - lucrare prezentată în plenul conferinței
14. The computer assisted technologic design of the spinning technologies in the cotton like spinning mill - **Barbu Ionel**, Mihai Ciocoiu - 4<sup>th</sup> International Conference TEXSCI 2000, **Liberec, Cehia**, 12-14 June, Proceedings pag.343 - lucrare prezentată poster
15. Program a gyurusfonogeporsok fordulatszamanak optimalasara - **Barbu Ionel**, Mihai Ciocoiu - Magyar Textiltechnika - **Budapest, Hungary**, Nr. 1/2001, pag 7-8
16. Study about the draft influence over the yarn characteristics - **Barbu Ionel** - New ClothMarket - **Ahmedabad, India**, April 2001, pag. 41
17. Design of the cotton type blends using the Symplex Programmes - **Barbu Ionel**, Carpus Eftalea, Ciocoiu Mihai - 8<sup>th</sup> International Conference on Textile Raw Materials 16 - 17 May, 2001, **Budapest, Hungary**, pag. 48 - 53
18. Contributions to the cotton and cotton like fibers spinning technologies' optimizations - **Barbu Ionel** - New Cloth Market - **Ahmedabad India** June 2001, pag. 39 - 41
19. A kartolasi tehnologiai parameterek optimalasara - **Barbu Ionel** - Magyar Textiltechnika, **Budapest, Ungaria**, Nr.2/2001, pag.5-7 , **HUISSN - 0025-0309**

20. A pamut es polieszterbol keszult szalak nyujtasanak tehnikai modelalasa - **Barbu Ionel** - Magyar Textiltechnika, **Budapest, Ungaria**, Nr. 4/2001 ,pag.14-15, **HU ISSN - 0025-0309**
21. Mathematical model of the interdependence between the yarns' characteristics and the characteristics of fabrics with strategic destination - Alex. Popa, Adina Bucevschi, **Ionel Barbu**, Erzselet Airinei - The 3 rd International Conference of the Textile Research Division National Research centre, **Cairo, Egypt**
22. Contribution about scientifically design of textile articles for medical field - Alex. Popa, Adina Bucevschi, **Ionel Barbu**, Erzselet Airinei - The 3 rd International Conference of the Textile Research Division National Research centre, **Cairo, Egypt**, June, 2006,
23. Mathematical model of the interdependence between the yarns' characteristics and the characteristics of fabrics with technical destination - Alex. Popa, Adina Bucevschi, **Ionel Barbu**, ș.a. - The 7 th International Textile Conference, **Maribor, Slovenia**, June, 2006
24. Contribution about scientifically design of textile articles for technical fields - Alex. Popa, Adina Bucevschi, **Ionel Barbu**, s.a. - The 7 th International Textile Conference, **Maribor, Slovenia**, June 2006

### Works ISI

1. Computer aided design technologies in spinning cotton spinning - **Barbu Ionel**, Ciocoiu Mihai - **Industria Textilă** nr.1/1998, pag.21-22, București
2. Experimental data in cotton spinning - **Barbu Ionel**, Ciocoiu Mihai, Oniță Aurel - **Industria Textilă** nr.1/1998, pag.27-28, București
3. TURMFI - speed optimization program was to ring spinning machines - **Barbu Ionel**, Ciocoiu Mihai, Oniță Aurel - **Industria Textilă** nr.2/1998, pag. 90-92, București
4. The design blends cotton fiber type methods Soloviev,Vancicov, Birembaum and Usenko - PROFIR - **Barbu Ionel**, Ciocoiu Mihai, Oniță Aurel - **Industria Textilă** nr.2/1998, pag. 78-85 București
5. Calculation program type cotton blends characteristics - AMESBBC - **Barbu Ionel**, Mihai Ciocoiu, Aurel Oniță - **Industria Textilă** nr.1/1999, pag. 7-11,București
6. ZUREK - design program type cotton fiber mixtures by means Zurek - **Barbu Ionel**, Ciocoiu Mihai, Oniță Aurel - **Industria Textilă** nr.2/1999, pag. 90-95,București
7. The design blends tricomponents - TRICOMP - **Barbu Ionel**,Mihai Ciocoiu - **Industria Textilă** nr.4/1999, București
8. Influence of process parameters on the characteristics carding cotton yarn 100%- **Barbu Ionel**, Mihai Ciocoiu, Adrian Clepcea - **Industria Textilă**, nr. 1/2000, pag. 12-16, București

*Note: ISI journal Industria Textila is from 2006, so I have not published in the magazine is quoted period*

### Romanian journals not listed in ISI, but indexed in international databases (author), lately

1. Ionel Barbu, Adina Bucevschi - Study on the influence the participation rate of polyester fibers on the characteristics of the yarn from a binary blend - Annals of the University of Oradea, fascicle of Textiles, Leatherwork, 1-2 june 2012
2. Barbu Ionel - Increasing labor productivity by modernizing equipment in preparation to spinning cotton - Annals of the "Constantin Brancusi" University of Targu Jiu, Engineering Series, 2012, No. 4, ISSN 1842 – 4856, pg. 121-132, (B+)
3. Barbu Ionel - Improving the quality yarns and increasing labor productivity through modernization of spinning machinery - Annals of the "Constantin Brancusi" University of Targu Jiu, Engineering Series, 2012, No. 4, ISSN 1842 – 4856, pg. 133- 144, (B+)
4. G.Asavei , Ionel Barbu - Method questionnaire–preliminare phase to optimize confort characteristics of materials to achieve special purpose clothing - Annals of the "Constantin Brancusi" University of Targu Jiu, Engineering Series, 2012, No. 4, ISSN 1842 – 4856, pg. 258- 265, (B+)

5. G.Asavei , Ionel Barbu - Surface treatments applied on fabrics used for police uniforms for protection against environmental factors - Annals of the "Constantin Brancusi" University of Targu Jiu, Engineering Series, 2012, No. 4, ISSN 1842– 4856, pg. (B+)
6. M. Pustianu, A. Popa, Ionel Barbu, E. Airinei, M. Fogorasi, M. Szabo, A. Bucevschi - Study on swot analysis of a textile finishing company that uses new technologies and computerized equipment - Annals of the "Constantin Brancusi" University of Targu Jiu, Engineering Series, 2012, No. 4, ISSN 1842 – 4856, pg. 354- 365, (B+)

### **Economic field**

#### **Romanian journals not listed in ISI, but indexed in international databases (author)**

1. Barbu Ionel, Barbu Sergiu-Aurelian - Analysis of rural tourism potential of region Crisana - European Integration – New Challenges EINCO 2012, 25-26 may 2012, Oradea, Section Economics and Business Administration pag. 58
2. Ionel Barbu, s.a. - Rural touristic potential of south Crisana - International Scientific Symposium Sustainable Rural Development, Banat's University of Agricultural Sciences and Veterinary Medicine Timisoara, 25 may 2012, pag 137
3. Barbu Ionel - Influence of crisis on rural tourism in Arad county - Lucian Blaga" University of Sibiu, Romania, Faculty of Economic Sciences Economic Sciences, 19<sup>th</sup> International Economic Conference - IECS 2012, "The persistence of the global economic crisis: causes, implications, solutions" June 15, 2012, Sibiu, Romania , pag. 21
4. Barbu Ionel - Rural tourism in Crisana region between 1990-2010 – part I – Eco-Trend 2012, november 23-24, 2012, Targu Jiu
5. Barbu Ionel - Rural tourism in Crisana region between 1990-2010 – part II - Eco-Trend 2012, november 23-24, 2012, Targu Jiu
6. Ionel Barbu, Sergiu Barbu - Rural tourism - economic implications - International scientific conference, Ecotrend 2011, 8-th edition, Târgu Jiu
7. Ionel Barbu - Tourism in Arad county. Rural tourism - economic implications - Annals - Economy series, 2011, vol. 4, pages 32-35, Constantin Brancusi University, Faculty of Economics Sciences

#### **Foreign journals not listed in ISI, but indexed in international databases (author)**

Barbu, I.: The Potential Rural Religious Tourism of south Crisana Region from Romania and the Economic Implications of Rural Tourism, Annals of DAAAM for 2012 & Proceedings of the 23rd International DAAAM Symposium, ISBN 978-3-901509-91-9, ISSN 2304-1382, pp 0893 – 0896

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