

2010 – Towards a Learning and Knowledge Society – 2030



## **Virtual Learning – Virtual Reality**

# **The 6<sup>th</sup> INTERNATIONAL CONFERENCE ON VIRTUAL LEARNING**

## **PROGRAM of ICVL 2011**

The Conference will be held in the **"Babeş-Bolyai" University of CLUJ - NAPOCA,**  
**Faculty of Mathematics and Computer Science,**  
1 Mihail Kogalniceanu Street, CLUJ - NAPOCA

**First Floor - Conference Hall: "Tiberiu Popoviciu" Amf.**

### **SCHEDULE**

#### **FRIDAY – October 28, 2011**

14:00-18:30 Registration Desk (First Floor HALL )

19:00-21:00 Welcome Reception (Cocktail – "Piramida" Restaurant, UBB Cluj-Naploca)

#### **SATURDAY – October 29, 2011 (First Floor HALL "Tiberiu Popoviciu")**

8:30-9:00 a.m. - Registration Desk (First Floor HALL "Tiberiu Popoviciu")

9:00- 11:30 - Conference opening and Plenary Session (**Workshop** and Section **M&M**)

11:30-12:00 and 15:30 – 16:00 Coffee Break

12:00-18:00 Plenary Session-Section **M&M, TECH, SOFT** and **Intel® Education**

## **PLENARY SESSION**

**SATURDAY 9.00 - 11.30 and 12-18 Plenary Session (First Floor HALL “T. Popoviciu”)**

Moderators: Dr. Dorin Mircea POPOVICI, Dr. Ronan QUERREC, Prof. Olimpius ISTRATE

### **Workshop “Haptic Feedback Systems in Education”**

NO	Paper and Authors	Page
<b>1</b>	SenseGraphics - Medical Simulators Built on H3DAPI  <b>Tommy Forsell</b>	<b>27</b>
<b>2</b>	An approach for teaching mechanisms using haptic systems  <b>Tiberiu Butnaru, Florin Girbacia, Silviu Butnaru, Andreea Beraru, Doru Talaba</b>	<b>30</b>
<b>3</b>	Knowledge Capture inside a Haptic Soldering Environment  <b>R.C.W. Sung, J.M. Ritchie, T. Lim, R. Dewar &amp; N. Weston</b>	<b>37</b>
<b>4</b>	Haptic User Interfaces and Practice-based Learning for Minimally Invasive Surgical Training  <b>Felix G. Hamza-Lup, Adrian Seitan, Costin Petre, Mihai Polceanu, Crenguta M. Bogdan, Aurelian Nicola Dorin M. Popovici</b>	<b>44</b>
<b>5</b>	A Brief Survey of Visuo-Haptic Simulators for Dental Procedures Training  <b>Crenguta M. Bogdan, Alexandru F. Dinca, Dorin M. Popovici</b>	<b>54</b>
<b>6</b>	VirTeaSy a haptic simulator for dental education.  <b>Jérémy Cormier, Denis Pasco, Cédric Syllebranque, Ronan Querrec</b>	<b>61</b>

## **Section Models & Methodologies**

NO	Paper and Authors	Page
<b>7</b>	The Romanian Projects for e-Learning Technologies  <b>Marin Vlada, Radu Jugureanu, Grigore Albeanu</b>	<b>71</b>
<b>8</b>	Complex IT Projects in Education: The Challenge  <b>Stefan Morcov</b>	<b>78</b>
<b>9</b>	Professionalism in the Education System Today  <b>Olimpius Istrate, Simona Velea</b>	<b>89</b>
<b>10</b>	Current Issues of Digital Education  <b>Olimpius Istrate</b>	<b>94</b>
<b>11</b>	Case Study: Using Drupal platform for eContent Management  <b>Marin Vlada, Adrian Adăscăliței</b>	<b>98</b>
<b>12</b>	Policy Considerations for Managing 3D Multi User Learning Environments –	<b>105</b>

	Achieving Usability and Trust for Learning	
	<b>Indika Perera, Colin Allison, Alan Miller</b>	
<b>13</b>	RENOVA - A Knowledge Transfer and Framework Construction for Nursing Staff across Europe to Develop Professional Skills as Managers	<b>112</b>
	<b>Delia Oprea, Monica Florea</b>	
<b>14</b>	An Educational Ontology for Teaching University Courses	<b>117</b>
	<b>Mihaela Oprea</b>	
<b>15</b>	Improving E-learning Assessment and Test Feedback through Bayesian Belief Networks	<b>123</b>
	<b>Horea A. Greblă, Rareș F. Boian</b>	
<b>16</b>	Usage of Petri nets in designing and evaluating interactive animations	<b>129</b>
	<b>Martin Magdin, Milan Turčáni</b>	
<b>17</b>	Learnability Testing: a Case Study	<b>135</b>
	<b>Vlad Mihaescu, Silviu Vert</b>	
<b>18</b>	ICT in education: responsible use or a fashionable practice. The impact of eTwinning action on the education process	<b>141</b>
	<b>Simona Velea</b>	
<b>19</b>	Involving Students in Maths eTwinning Projects	<b>145</b>
	<b>Irina Vasilescu</b>	
<b>20</b>	Understanding (the use of) microblogging as a virtual environment for teaching and learning in academic courses	<b>150</b>
	<b>Gabriela Grosseck, Carmen Holotescu</b>	
<b>21</b>	The interactive teaching methods – the vectors of success in learning physics	<b>160</b>
	<b>Gelu Maftai</b>	
<b>22</b>	Innovative Potential of Social Networks in Blended Learning	<b>167</b>
	<b>Margarita Pehlivanova, Snejana Dineva, Zlatoeli Duceva</b>	
<b>23</b>	Jitt Approach for the Study of Magnetorezistive Materials	<b>172</b>
	<b>Florentina Iofciu, Cristina Miron, Stefan Antohe</b>	
<b>24</b>	Interdisciplinary approach of nanoscience using PBL method and WEB 2.0 tools	<b>176</b>
	<b>Florentina Iofciu, Cristina Miron, Stefan Antohe</b>	
<b>25</b>	Learning pathways - a Perspective in the Physics Learning	<b>181</b>
	<b>Mihaela Garabet, Cristina Miron</b>	
<b>26</b>	Bridging the Gap between Industry and Education: the Impact of Social Networks	<b>185</b>
	<b>Ioana Andreea Stănescu, Andriani Piki, Carmen Elena Cîrnu</b>	
<b>27</b>	An Overview of the Most Important Aspects Related to Quality Assurance in Computer Supported Collaborative E-Learning	<b>192</b>
	<b>Iuliana Dobre</b>	
<b>28</b>	Evaluation of Student's Knowledge – An Overview of the Testing and Assessment Tools for E- Assessment	<b>199</b>
	<b>Iuliana Dobre</b>	
<b>29</b>	Disambiguation of bright fringe notion through teaching Moiré patterns	<b>206</b>
	<b>Mihail Dafinei, Delia Constanta Davidescu, Adrian Dafinei, Stefan Antohe</b>	
<b>30</b>	Positiveness of Web-based site for General and Inorganic Chemistry in Blended Learning	<b>211</b>
	<b>Snejana Dineva, Zlatoeli Duceva</b>	

<b>31</b>	Blended Learning and Applying New Tools and Services of E-learning Support <b>Nedeva Veselina, Dineva Snejana</b>	<b>218</b>
<b>32</b>	Increasing the quality of e-learning by improving the testing system <b>Nedeva Veselina</b>	<b>224</b>
<b>33</b>	A method of determining the static web pages that unbalance the complexity of the web application <b>Doru Anastasiu Popescu</b>	<b>229</b>
<b>34</b>	Adobe Flash Professional - an important contribution to increasing the quality and performance of the Romanian education <b>Liliana Violeta Constantin, Emil Ștefan Barna</b>	<b>234</b>
<b>35</b>	The interactive conceptual maps – a step towards performance <b>Liliana Violeta Constantin, Emil Ștefan Barna</b>	<b>241</b>
<b>36</b>	Collaborative E-Learning Model <b>Tolea Eniko Elisabeta, Costin Aurelian Răzvan</b>	<b>248</b>
<b>37</b>	A Metamodel for Manipulating Business Knowledge Within a Data Warehouse <b>Iloa Mariana Nagy, Eniko Elisabeta Tolea</b>	<b>254</b>
<b>38</b>	Application of Interactive Devices and Virtual lab in Chemistry Learning <b>Dineva Snejana, Stoikova Vania</b>	<b>261</b>
<b>39</b>	On line course for warping technology <b>Mariana Ursache, Dorin Dan</b>	<b>268</b>
<b>40</b>	Training in a virtual learning environment in the theoretical module - a factor for development of "responsible" driver <b>Margarita Pehlivanova, Zlatoeli Duchevea</b>	<b>274</b>
<b>41</b>	The potential of informal learning in the formal context <b>Elena Bruma, Luminita Popa</b>	<b>280</b>
<b>42</b>	Context based Expert Finding in Online Communities <b>Ahmad Kardan, Amin Omidvar, Mojtaba Behzadi</b>	<b>286</b>
<b>43</b>	Making Use of Educational Computer Games in Modern Teaching and Assessment Models, Methods, and Practices <b>Ioana Stoica, Rodica Perjoiu, Cristina Miron</b>	<b>293</b>
<b>44</b>	Representing Human Resource Knowledge in RDF <b>Anamaria Szekely, Anita Hejja, Robert Andrei Buchmann</b>	<b>298</b>
<b>45</b>	Computer Skills Analysis in National Curricular Documents <b>Roxana Enache</b>	<b>305</b>
<b>46</b>	From Managed Learning Environment to Personal Learning Environment <b>Tudor Bragaru, Ion Craciun</b>	<b>311</b>
<b>47</b>	Physics experiments with Yenka software <b>Carmen Gabriela Bostan</b>	<b>318</b>
<b>48</b>	Raising engagement in e-learning through gamification <b>Cristina Ioana Muntean</b>	<b>323</b>
<b>49</b>	The digital portfolio- interactive method of assessment <b>Valeriu Ștefănescu</b>	<b>330</b>
<b>50</b>	Laboratory experiments and interactive models of physical training lessons <b>Valeriu Ștefănescu</b>	<b>335</b>

	<b>Valeriu Ștefănescu</b>	
<b>51</b>	Google Apps for Education – a powerful solution for global scientific classrooms	<b>340</b>
	<b>Elena Railean</b>	
<b>52</b>	Technical and technological skills of teachers	<b>347</b>
	<b>Cornelia Ștefănescu</b>	
<b>53</b>	Training Teachers University - some reflections on the development of digital competence in the knowledge society	<b>352</b>
	<b>Nicoleta Duță</b>	
<b>54</b>	Study Strategies of Online Learners	<b>358</b>
	<b>Asst. Prof. Dr. Ersun Iscioglu</b>	
<b>55</b>	The Past, Present and Future of a wiki in the higher education	<b>365</b>
	<b>Valerica Doina Muntean</b>	

## Section TECH

NO	Paper and Authors	Page
<b>56</b>	Exploring Direct Communication and Manipulation on Interactive Surfaces to Foster Novelty in a Creative Learning Environment  <b>Alejandro Catala, Fernando Garcia-Sanjuan, Jose Azorin, Javier Jaen, Jose A. Mocholi</b>	<b>373</b>
<b>57</b>	3D interaction techniques in Virtual Reality Applications for Engineering Education  <b>Cristian Dudulean, Ionel Starețu</b>	<b>380</b>
<b>58</b>	Principles of Serious Games Interoperability  <b>Ioana Andreea Stănescu, Ion Roceanu, Antoniu Ștefan, Ivan Martínez Ortiz</b>	<b>386</b>
<b>59</b>	The Energy and the Entropy of Hybrid Multi-Agent Systems  <b>Barna Iantovics, Florin F. Nichita</b>	<b>391</b>
<b>60</b>	Lectora – a Complete eLearning Solution  <b>Irina Ioniță, Liviu Ioniță</b>	<b>395</b>
<b>61</b>	Semantic Web Technologies Integrated in a SOA-Based E-Learning System  <b>Eugen Zaharescu, Georgeta-Atena Zaharescu</b>	<b>400</b>
<b>62</b>	Enhanced Virtual E-Learning Environments Using Cloud Computing Architectures  <b>Eugen Zaharescu, Georgeta-Atena Zaharescu</b>	<b>407</b>
<b>63</b>	Learning environments in eBook format  <b>Mária Bakó, László Aszalós</b>	<b>414</b>
<b>64</b>	Web-based teaching of a Computer Graphics course in a Computer Science Faculty  <b>M. S. Jalobeanu</b>	<b>420</b>
<b>65</b>	Student's attitudes towards learning in educational environment  <b>Svetlana Čičević, Andreja Samčović, Marjana Čubranić-Dobrodolac</b>	<b>427</b>
<b>66</b>	A Novel Architecture for Content Recommendation in E-learning Environments Based on K-Means Clustering & Association Rule Mining  <b>Ahmad A. Kardan, Nahid Ghassabzadeh Saryazdi, Hamed Mirashk</b>	<b>434</b>
<b>67</b>	Intuitionistic Fuzzy-Based Method for Assessing the Learner's Knowledge Level and Personalization of Learning Path	<b>441</b>

	<b>Roya Hosseini, Ahmad Kardan</b>	
<b>68</b>	Human motion reconstruction based on static postures	<b>448</b>
	<b>Aileni Raluca Maria</b>	
<b>69</b>	Project Method Implementation At The High School Grades, Qualification Mecatronist Technician	<b>451</b>
	<b>Diana Virginia Grănescu</b>	
<b>70</b>	Learner Behavior Analysis through Eye Tracking	<b>458</b>
	<b>Ismail El Haddioui &amp; Mohamed Khaldi</b>	

## Section SOFT

NO	Paper and Authors	Page
<b>71</b>	The New Graphic Tools In The Easy-Learning Platform <b>Radu Rădescu, Valentin Pupezescu, Mihai Ureche</b>	<b>464</b>
<b>72</b>	Second Life – a Virtual Learning Environment <b>Liviu Ioniță, Irina Ioniță</b>	<b>474</b>
<b>73</b>	A software application for modeling the pipeline transportation process <b>Daniela Tudorica</b>	<b>478</b>
<b>74</b>	Verification of the web applications using sink web pages <b>Doru Anastasiu Popescu, Catrinel Maria Dănăuță</b>	<b>485</b>
<b>75</b>	Macromedia in Physics experiments <b>Carmen Gabriela Bostan</b>	<b>492</b>
<b>76</b>	Software application for fabric material behavior prediction <b>Aileni Raluca Maria, Ciocoiu Mihai</b>	<b>497</b>
<b>77</b>	Refactoring Impact Formal Representation on the Internal Program Structure <b>Camelia Chisăliță-Crețu</b>	<b>500</b>

## Section Intel® Education

NO	Paper and Authors	Page
<b>78</b>	Learning Chemistry through Puzzle Based Game: Atoms to Molecule <b>Maya Agarwal, Shubhajit Saha</b>	<b>511</b>
<b>79</b>	Remote experiments in Moissil e-lab <b>Mihaela Garabet, Cristina Miron, Ion Neacsu</b>	<b>518</b>
<b>80</b>	You Too Can Search For The Higgs Boson! <b>Ioana Stoica, Sorina Elena Lupu</b>	<b>522</b>

<b>81</b>	Assuring the Motivational Climate in the Process of Learning Physics by Using Blogs <b>Maria Dinica, Luminita Dinescu, Cristina Miron</b>	<b>527</b>
<b>82</b>	The Stimulation of Students' Creativity by Using Multimedia Platforms <b>Maria Dinica, Luminita Dinescu, Cristina Miron</b>	<b>533</b>
<b>83</b>	New Technologies in EFL: Why Learning in the Public Space Matters <b>Anisoara Pop</b>	<b>538</b>
<b>84</b>	Exploring the New Technologies in EFL through Virtual Online Professional Development Workshops – EVO-BAW <b>Anisoara Pop, Teresa Almeida d'Eça</b>	<b>543</b>
<b>85</b>	The impact of Internet use on teacher training, manager training and education <b>Roxana Enache</b>	<b>550</b>

## **Notes**