



# **2015**

## **SCIEI Toronto, Canada**

### **CONFERENCES PROGRAM**

**August 17-18, 2015**

2015 2nd International Conference on Software Engineering(ICOSE 2015)

2015 2nd International Conference on Substantial Environmental Technologies(ICSET 2015)

2015 4th International Conference on Advancements in Information Technology(ICAIT 2015)

2015 4th International Conference on Electronics, Mechatronics and Automation(ICEMA 2015)



# Call for Papers

**December 2015, Abu Dhabi, UAE**

**Abu Dhabi, UAE, Dec 06-08, 2015**

**Submission deadline: 2015-9-10**

**2015 The 2nd International Conference on Renewable Energy Technologies (ICRET 2015)**

<http://icret.org/>, submission e-mail: [icret@scie.i.us](mailto:icret@scie.i.us).

Conference proceeding of ICRET 2015 will be selected to be published by Journal of Clean Energy Technologies (ISSN: 1793-821X)

**2015 The 2nd International Conference on Mechatronics and Mechanical Design (ICMMD 2015)**

<http://icmmd.org/>, submission e-mail: [icmmd@scie.i.org](mailto:icmmd@scie.i.org).

Conference papers will be selected to publish by Applied Mechanics and Materials Journal.

**2015 The 4th International Conference on Nanostructures, Nanomaterials and Nanoengineering (ICNNN 2015)**

<http://icnnn.org/>, submission e-mail: [icnnn@scie.i.org](mailto:icnnn@scie.i.org).

Conference papers can be selected and published by by Advanced Materials Research Journal.



**December 2015, Tokyo, Japan**

**Tokyo, Japan, Dec 26-27, 2015**

**Submission deadline: 2015-9-25**

**2015 The 4th International Conference on Information and Intelligent Computing (ICIIC 2015)**

<http://www.iciic.org/>, submission e-mail: [iciic@scie.i.org](mailto:iciic@scie.i.org)

Conference papers can be selected and published by Journal of Computers or Journal of Advances in Information Technology.

**2015 The 4th International Conference on Control, Robotics and Informatics (ICRI 2015)**

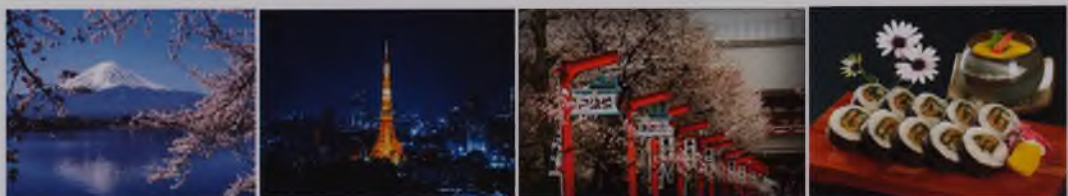
<http://www.icri.org/>, submission e-mail: [icri@scie.i.org](mailto:icri@scie.i.org)

Conference papers can be selected and published by Journal of Automation and Control Engineering or Lecture Notes on Information Theory.

**2015 The 4th International Conference on Network, Communication and Computing (ICNCC 2015)**

<http://www.icncc.org/>, submission e-mail: [icncc@scie.i.org](mailto:icncc@scie.i.org).

Conference papers can be selected and published by Journal of Communications or International Journal of Computer and Communication Engineering.



Toronto, Canada

# 2015 SCIEI Toronto, Canada CONFERENCES PROGRAM

International Conference on Software Engineering  
(ICSE 2015)

International Conference on Substantial Environmental  
Technologies  
(ICSET 2015)

International Conference on Advancements in Information  
Technology  
(ICAIT 2015)

2015 6th International Conference on Electronics, Mechatronics and  
Automation  
(ICEMA 2015)



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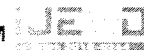
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<p>E013</p>	<p>Equilibrium Control on Four-Limbed Climbing Robot  <b>Mr. Nguyen Anh Dung</b>, Akira Shimada                  Shibaura Institute of Technology, Japan</p> <p style="text-align: center;">Abstract</p> <p>This research represents a method to improve the technology that enables the design and simulation of a four-limbed climbing robot, named FLC-Robot. It is equipped with planning capabilities to free climb vertical terrain. It means to extend the robot's ability to a vertical direction under the gravity force. However, we need to analyze climbing and create the theory in parallel with hardware development. In this paper, the equilibrium allowance area of the four-limbed climbing robot is introduced and the corresponding torque is calculated. Hence, this paper starts with a rudimentary analysis of mechanical structure and kinematics of FLC-robot. Secondly, a 3D climbing robot model is built and simulated in Matlab-Simscape environment. Finally, the corresponding motion planning and control method is performed considering statics and dynamics.</p>
<p>E015</p>	<p>Teaching Industrial Robot Manipulators by Easy to Use Interface Systems  <b>Prof. Genci Capi</b>, Delowar Hossain, Shin-Ichiro Kaneko and Koco Bode                  University of Toyama, Japan</p> <p style="text-align: center;">Abstract</p> <p>The need for simple and safe teaching methods for robot manipulators need to be considered because: 1) Small size robots presence in everyday life environments is increasing requiring non-experts operators to teach the robot; 2) In small applications, the operator has to teach several different motions in a short time. In this paper, we evaluate the performance of three teaching systems for robot manipulators which utilize the following devices 1) i-phone; 2) haptic and 3) kinect. In difference from previous force sensor based teaching, proposed systems are safe because the operator keeps the distance with the robot. The performance is compared in terms of time to complete the task and accuracy. The results of 10 non-experienced subjects show the advantages of one method over the others.</p>
<p>E2003</p>	<p>Enhancement of ZnO films photoluminescence by annealing and H-plasma treatment                  Kh.A. Abdullin, M.T. Gabdullin, L.V. Gritsenko, N.R. Guseinov, D.V. Ismailov, Zh.K. Kalkozova, S.E. Kumekov, <b>Ms. Zhanar O. Mukash</b>, A.Yu. Sazonov, E.I. Terukov                  Al-Farabi Kazakh National University, Kazakhstan</p> <p style="text-align: center;">Abstract</p> <p>Zinc oxide has unique physical characteristics, such as wide bandgap (<math>\sim 3.37</math> eV), a large exciton energy; its electrical characteristics can be controlled over a wide range by varying the stoichiometry and doping. So this oxide semiconductor becomes relevant material for a wide range of applications. An important factor for practical use is its low cost, biocompatibility and non-toxicity. Zinc oxide and materials based on it are used in short-wavelength light-emitting diodes, detectors, biosensors, piezoelectric devices, power electronics and many other applications.</p> <p>In this paper, the development of new method to increase photoluminescence intensity of ZnO films will be presented.</p> <p>PL spectra of ZnO (B) samples were investigated under 300 nm excitation wavelength. The spectra consist of excitonic emission near the band gap energy (<math>\sim 380</math> nm) and the impurity band with a maximum around 550 nm. It was shown that hydrogen plasma treatment at</p>

	<p>room temperature increases photoluminescence intensity significantly. The PL intensity increases considerably just after 10 s treatment, and gradually increases with the duration up to 500 s, reaching saturation afterwards. The PL intensity increases more than 100 times under H-plasma treatment, and the spectrum contains only excitonic PL band at ~380 nm. PL spectra were studied after preliminary annealing in air and processing in the H- plasma. It was found that the thermal pretreatment of samples greatly enhances the effect of hydrogen plasma treatment on the PL intensity. The increase in PL intensity depends on the temperature of preliminary calcination in air: the higher the temperature of pre-annealing in the range from 200oC to ~500oC for a fixed annealing time (30 min), the greater the photoluminescence intensity after H-plasma treatment. It can be assumed that the annealing causes a transformation of nonradiative recombination centers, therefore they can be more easily passivated by hydrogen.</p> <p>The change of electrical properties of ZnO (B) samples under thermal annealing in air was investigated. It was shown that the annealing above 200 °C causes degradation of the electrical characteristics. The main culprit is a strong decrease of free carrier mobility with a slight decrease of the carrier concentration. The annealing in vacuum at temperatures of ~500oC largely restores the electrical characteristics of ZnO, which leads to a value of the carrier concentration <math>\sim 4 \times 10^{19} \text{cm}^{-3}</math>, the mobility of <math>\sim 30 \text{ cm}^2/\text{V}\cdot\text{s}</math> and <math>\sim 5 \times 10^{-3} \text{ Ohm}\cdot\text{cm}</math> regardless of the values before vacuum annealing.</p>
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**Session 4-- Ecological development and environmental protection**

Chair:

Time: 16:50pm-18:30pm

Venue: **Essex Lounge**

<p>T004</p>	<p>Integrated Energy Solution towards Sustainable Isolated Communities Golnar Hejazi, <b>Mr Christian Wimpler</b>, Eduardo de Oliveira Fernandes, Manuel A. Matos and Stephen R. Connors University of Porto, Portugal</p> <p style="text-align: center;">Abstract</p> <p>Since any activity requires energy, access to energy is an essential means for all. Especially isolated communities in developing countries often have no or limited access to affordable energy resources. Yet, more than 1.5 billion people do not have the possibility to use electricity and around 2 billion people also rely on premier resources such as dung and wood for heating and cooking. It is often those premier resources that cause indoor air pollution and health problems. Besides, the minimum level of energy needs can frequently not be reached.</p> <p>An integrated approach for isolated communities to improve access to energy and increase the level of health and well-being in housing will be presented. Housing and other physical elements and conditions of such communities will be analyzed so that sustainable livelihoods can be achieved. Thereby the needs and opportunities for the enhancement of housing and living in general have to be balanced. In the end, planning for sustainable livelihoods requires an integrated framework to guarantee sustainable development and growth.</p>
<p>T1001</p>	<p>Willingness to pay of citizens for environmental services of farming systems; case study of Qazvin, Iran <b>Dr Ali Asadi</b>, Hojjat Varmazyari, Khalil Kalantri, Inakwu Odeh University of Tehran, Iran</p>