

ASME (American Society of Mechanical Engineers)

2016 IMECE International Mechanical Engineering Congress & Exposition, Phoenix, Arizona, November 11 – 17, 2016

- 1. IMECE2016-68180 Session:** 8-10-2 Energy Energy Systems for Buildings *Technical Paper Publication*

Design and Construction of a Heated Garden System Utilizing Steam Condensate from an On Site Boiler

Robert Dell, *The Cooper Union*

Chih Shing Wei, *Cooper Union*

Raj Parikh, *Metropolitan Building Consulting Group*

Runar Unnthorsson, *University of Iceland*

Nicholas Mitchell, *The Cooper Union for the Advancement of Science and Art*

William Foley, *Cooper Union*

- 1. IMECE2016-68173 Session** 10-4 Heat Transfer and Thermal Engineering Heat Transfer in Energy Systems; Design and Performance Analysis *Technical Paper Publication*

Heat Transfer Analysis of Shell-and-Helical-Coil Heat Exchangers

Authors

Anthony Edward Morris, *The Cooper Union*

Chih Shing Wei, *Cooper Union*

Runar Unnthorsson, *University of Iceland*

Robert Dell, *The Cooper Union*

- 2. IMECE2016-68179** 10-10-1 Heat Transfer and Thermal Engineering Thermal Management of Solar and Alternative Energy Equipment *Technical Paper Publication*

Design of a Clamp for a Thermoelectric Generator Using Bimetallic Thermal Properties

Authors

Robert Dell, *The Cooper Union*

Chih Shing Wei, *Cooper Union*

Nicholas Mitchell, *The Cooper Union for the Advancement of Science and Art*

Runar Unnthorsson, *University of Iceland*

3. **IMECE2016-68177** Section 5-18 Dynamics, Vibration and Control,
Mobile Robots, and Unarmed Ground Vehicles

*Technical
Paper
Publication*

Design of a Low-Power Quadruped Robot for Remote Data Acquisition in a Heated Garden

Authors

Nicholas Mitchell, *The Cooper Union for the Advancement of Science and Art*

Kristin Miller, *RMF Engineering, Inc.*

Chih Shing Wei, *Cooper Union*

Runar Unnthorsson, *University of Iceland*

William Foley, *The Cooper Union*

Robert Dell, *The Cooper Union*

GRC (Geothermal Resources Council)

GRC Annual Meeting & GEA Geothermal Energy Expo
23-26 October, Sacramento, California, USA

Category: Direct Use

1. A Thermoelectric Powered Quadruped Robotic System for Remote Monitoring of Geothermal Open Field Heated Gardens in Iceland,

Dell, Robert & Wei, C.S. & Unnthorsson, Runar & Mitchell,
Nicholas

2. Thermally Enhanced Open Field Heating Agricultural System Using Waste Geothermal Hot Water and low Temperature Steam in Iceland and Waste Municipal Steam in New York City,

Dell, Robert & Wei, C.S. & Unnthorsson, Runar & Mitchell, Nicholas