



### [WD3] Atmospheric Pressure Discharges and Thermal Plasmas

Date / Time	July 25 (Wed.), 2018 / 15:30-17:30
Place	Room D (#115)
Session Chair(s)	Jong-Shinn Wu (Nat'l Chao Tung Univ., Taiwan) Ho Jun Kim (Dong-A Univ., Korea)

#### WD3-1 [Invited]

15:30-16:00

##### 3D Particle Simulations and Analysis of Streamer Discharge in Atmospheric Air

Anbang Sun

*Xi'an Jiaotong Univ., China*

#### WD3-2

16:00-16:20

##### Simulation of Nanosecond Pulse Discharge in Air Using Advanced Plasma Models

Bernard Parent

*Pusan Nat'l Univ., Korea*

#### WD3-3

16:20-16:40

##### Modelling of Plasma-Species Mixing in Argon-Steam Arc Discharge for Broad Range of Currents and Argon Mass Flow Rates

Jiri Jenista<sup>1</sup>, Hidemasa Takana<sup>2</sup>, Satoshi Uehara<sup>2</sup>, Hideya Nishiyama<sup>2</sup>, Milada Bartlova<sup>3</sup>, Vladimir Aubrecht<sup>3</sup>, and Anthony Murphy<sup>4</sup>

<sup>1</sup>*Inst. of Plasma Physics ASCR, v.v.i., Czech*, <sup>2</sup>*Inst. of Fluid Science, Japan*, <sup>3</sup>*Brno Univ. of Tech., Czech*,

<sup>4</sup>*CSIRO Materials Science and Engineering, Australia*

#### WD3-4

16:40-17:00

##### Study on the Influence of the Turbulent-Dominated Gas Flow on the Characteristics of Atmospheric Pressure Plasma Jet

Yanhui Wang<sup>1</sup>, Yuanyuan Jiang<sup>1</sup>, Qinglin Wen<sup>1</sup>, Yuantao Zhang<sup>2</sup>, and Dezhen Wang<sup>1</sup>

<sup>1</sup>*Dalian Univ. of Tech., China*, <sup>2</sup>*Shandong Univ., China*

#### WD3-5 [Invited]

17:00-17:30

##### Numerical Study on Generation of Very Large Currents in Atmospheric Pulsed VHF Discharges

Yuantao Zhang and Shuhan Gao

*Shandong Univ., China*