

# The UTSR Gas Turbine Industrial Fellowship Program

William H. Day

Leonardo Technologies, Inc.
Contractor for the US
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#### Fellowship Program Description (1/2)

- Provides undergraduate and graduate-level engineering students with the opportunity to work at leading gas turbine industry sponsoring companies
- Provides the sponsoring companies an opportunity to recruit technical talent from a highly selective pool of applicants



#### Fellowship Program Description (2/2)

- Fellows spend 10-12 weeks over a summer working at a sponsoring company
- Fellows get a lump sum stipend of \$11,500 (undergraduates) or \$13,500 (graduates)
- Companies pay the stipends
  - OEMs pay \$25,000 per year and get 2 Fellows
  - Non-OEMs pay \$12,500 and get one Fellow
  - Member companies can hire additional Fellows from the applicant pool, and they will also be part of the Program.



#### **Typical Work Areas at Companies**

- Heat transfer
- Aerodynamics
- Combustion
- Thermodynamics
- Advanced materials and coatings
- Design
- Manufacturing
- Test and evaluation



#### **Eligibility**

- Must have a GPA of at least 3.0
- Must be US citizens or green card holders
- Undergraduates must complete their Junior year by June of the year that they work at the company



#### **Selection Process**

- Applicants provide transcript, letters of recommendation from faculty, description of technical area of most interest and list of companies they most want to work for
- Companies provide rank order of preferred applicants
- Offers are made for best match of company choices and applicants' choices



#### **Benefits to the Fellows**

- Work experience in the gas turbine industry is an advantage in seeking jobs after graduation – in industry or academia
- Work experience helps them decide which fields they like best within the GT industry
- Practical knowledge gained helps make their remaining academic work more relevant



#### Benefits to Companies (1/2)

- Host student Fellows proportional to dues level Assess some of the best students in the nation for future employment as they work on real world problems
- The students have been encouraged by their professors to apply and are interested in the gas turbine industry; an advantage in recruiting future employees



## Benefits to Companies (2/2)

- Historically, 80% of the UTSR Fellows benefit the gas turbine industry
  - 70% of them accept jobs with companies in the gas turbine industry
  - Another 10% stay in academia, teaching and researching on gas turbine topics



### Status of the Fellowship Program

- Since the fall of 2010, Southwest Research Institute is implementing the program for NETL, with oversight from LTI, site support contractor for NETL.
- 2015 Fellowship Program data:
  - 48 Eligible applicants
  - Made 9 offers to fill the 9 slots (100% acceptance)
  - 9 Fellows selected (19 % of eligible applicants)
  - 9 Universities
  - 6 Host Companies



### **Fellowship Host Companies 2015**

- **GE**
- Siemens
- Solar Turbines
- FlexEnergy
- Woodward Governor
- Florida Turbine Technologies



# 2015 Fellows (1/2)

| Fellow           | University             | Company        |
|------------------|------------------------|----------------|
|                  |                        |                |
| Agricola, Luca   | Ohio State University  | Solar Turbines |
| Bakir, Andrew    | U. of Colorado Boulder | FlexEnergy     |
|                  |                        |                |
| Betacour, Felipe | U. of Central Florida  | GE             |
| Pillung David    | Most Virginia II       | Siomons        |
| Billups, David   | West Virginia U.       | Siemens        |
| Dillard, Luke    | Cornell University     | Solar Turbines |



# 2015 Fellows (2/2)

| Fellow              | University           | Company         |
|---------------------|----------------------|-----------------|
|                     |                      |                 |
| Kempema, Kathryn    | U. of Wyoming        | GE              |
|                     | Embry Riddle         |                 |
| Lehmann, Matthew    | Aeronautical U.      | Florida Turbine |
|                     |                      |                 |
| Reuter, Christopher | Princeton University | Siemens         |
|                     |                      |                 |
| Sage, Dean          | U. of Florida        | Woodward        |



#### **Summary**

The UTSR Fellowship Program is providing valuable experience for the Fellows and a source of trained engineers for the gas turbine industry.

