

Resources International, Inc.

‘Educational Labs’

AEOLUS AERO TECH, Pvt. Ltd.

‘**Aeolus Aero Tech Pvt. Ltd.**’ (Aeolus) based in Bengaluru, Karnataka, India, provides a wide range of Products, Services and Technology Solutions in Alternative Energy, Automobile, Aeronautical, Space Tech, Defense and General Engineering OEMS. Aeolus offers a variety of equipments for laboratories to cater to R & D (educational & industry uses) and for academic institutions.

- ✓ Global Leader in Aerospace Products and Services
- ✓ Delivers affordable, high Technology Solutions
- ✓ Uncompromising Business Ethics & Delivery
- ✓ World class Technical Expertise & Collaboration
- ✓ Dedicated to Customer Satisfaction & Mission
- ✓ Assist with Manufacturing, Assembly and Testing
- ✓ Provide Life-time Engineering & Technical Support
- ✓ Champion Alternative, Green Energy Solutions

Aeolus Products & Services Domains

1. Educational Labs
2. Heat Pipes & Thermosyphons
3. Wind Tunnels
4. Space Science Products
5. Micro-Gravity Research
6. CubeSat: Design, Develop & Deploy
7. Wind Energy Technologies (500 W to 5 KW)

a) Educational Labs: Aeolus provides needed products and services to design and set up several educational laboratories for institutions teaching courses on Aeronautical Engineering, Materials Science, Thermodynamics, Automobile Engineering, and Space Technologies. These laboratory equipments enable state-of-the-art research & development in: Aerodynamics; Propulsion; Aircraft Structure; Airframe; Aircraft Systems: Aero Engine and Maintenance, Manufacturing Technology; Fluid Mechanics & Machinery; Thermodynamics & Heat Transfer; Mechanical Engineering, etc.

Educational Labs

- 1) Dynamics Lab
- 2) Fluid Mechanics Lab
- 3) Mechatronics Lab
- 4) Materials Strength Lab
- 5) Thermal Engineering Lab – I
- 6) Thermal Engineering Lab - II

b) Technology Convergence: Convergence of a number of emerging and disruptive technologies such as **Info-Nano-Bio-Eco and Space Tech** introduces enormous opportunities for meaningful research, major development and significant improvement in all aspects of life, including the

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Automobile, Alternative Energy, Aeronautical and Space industries. Educational Labs set up in institutions that teach in any of these disciplines will enable the students understand and learn to design, build and operate better, safer, eco-friendly and energy efficient machines.

A – 1) DYNAMICS Laboratory

AAT-DL01	CAM Analysis Apparatus
AAT-DL02	Motorized Gyroscopic Apparatus
AAT-DL03	Governor Apparatus
AAT-DL04	Whirling of Shafts
AAT-DL05	Static & Dynamic Balancing
AAT-DL06	Vibration Test Apparatus
AAT-DL07	Gear Models
AAT-DL08	Epicyclic Gear Train
AAT-DL09	Universal Joint Mechanism
AAT-DL10	Kinematics Engineering

A – 2) FLUID MECHANICS Laboratory

AAT-FM01	Flow Measurement Apparatus
AAT-FM02	Centrifugal Pump
AAT-FM03	Reciprocating Pump
AAT-FM04	Gear Pump
AAT-FM05	Submersible Pump Testing
AAT-FM06	Pelton Wheel Turbine (Closed Circuit)
AAT-FM07	Kaplan Turbine (Closed Circuit)
AAT-FM08	Francis Turbine
AAT-DL09	Universal Joint Mechanism
AAT-DL10	Kinematics Engineering

A – 3) MECHATRONICS Laboratory

AAT-MM01	Pneumatic Trainer Kit
AAT-MM02	Basic Hydraulic Trainer Kit
AAT-MM03	Systems Simulation Software
AAT-MM04	Microcontroller Kit, Stepper Motor, Circuits
AAT-MM05	LABVIEW Software

A – 4) MATERIALS STRENGTH Laboratory

AAT-SM01	Universal Testing Machine
AAT-SM02	Torsion Testing Machine
AAT-SM03	Impact Testing Machine
AAT-SM04	Brinnell Hardness Tester
AAT-SM05	Rockwell Hardness Testing Machine
AAT-SM06	Spring Testing Machine
AAT-SM07	Metallurgical Microscopes
AAT-SM08	Muffle Furnace

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A – 5) THERMAL Laboratory - I

AAT-TE01	IC Engine – 2 Stroke Diagram
AAT-TE02	IC Engine – 4 Strokes Diagram
AAT-TE03	Redwood Viscometer
AAT-TE04	Flash & Fire Point Apparatus
AAT-TE05	Diesel Engine Frictional Power
AAT-TE06	Morse Test Multi-cylinder Petrol Engine
AAT-TE07	4-Stroke Diesel Engine Heat Balance Test
AAT-TE08	Steam Boiler with Turbine
AAT-TE09	Steam Generator Performance & Energy Balance
AAT-TE10	Steam Turbine Performance & Energy Balance

A – 6) THERMAL Laboratory - II

AAT-TE201	Refrigeration Test
AAT-TE202	Reciprocating Air Compressor – Single/Two stage
AAT-TE203	Air Conditioning Test Rig
AAT-TE204	Heat Flow – Parallel and Counter-flow
AAT-TE205	Heat Transfer from Pin-Fin Apparatus
AAT-TE206	Stefan-Boltzmann Constant
AAT-TE207	Forced Convection Inside Tube
AAT-TE208	Heat Transfer from Vertical Cylinder
AAT-TE209	Pipe Insulation Thermal Conductivity
AAT-TE210	Guarded Plate Thermal Conductivity

d) Education Sector: Clients handle compliance of importing country regulations and international norms. As required, we offer customized Educational Laboratory Applications

- ✓ Durable components
- ✓ Longer shelf-life
- ✓ Fully functional
- ✓ Reliable over its lifetime.

e) Import Formalities: All sales are subject to Client obtaining required approvals and clearances by the respected authorities in their home country and release by the country of origin. Securing required approval / permit / import license / customs clearance, etc. and any related costs are the client's responsibility. Aeolus shall provide the standard shipping documents to facilitate these and offer customized solutions to suit our individual Client's exacting needs.

CONTACT:

Dr. M. S. Viji, MD,
President, **Resources International, Inc.**
895 Edgewater Drive,
Lexington, KY 40502-3159, USA.

msviji2020@riinc.net
Ph: 001-859-268 2112
<https://riinc.net>

PS: '**Resources International, Inc.**' Lexington, KY, USA, established in 1994, is an international Marketing and Import-Export firm, one of a group of privately held, family-owned companies.