**GMPT** Software Trial Application Form

**Version：December 2024**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Applicant Information** | | | | | |
| Contact Person： |  | | | Your Organization： |  |
| Contact Email： |  | | | Department： |  |
| Phone： |  | | | Position： |  |
| Organization Address： |  | | | | |
| **Information Related to Software Trial**  (Please check the box□ before the selected options) | | | | | |
| Requested Trial Software： | | □ Nuwa :  Semiconductor Process and Device Simulation Software (Microelectronic and Optoelectronic Devices)  □ Macondo :  Optical Waveguide Electromagnetic Simulation Software (Wave Optics and Integrated Photonics Simulation)  □ Rayzen:  Ray-Tracing Simulation and Optical Design Software (Imaging and Non-Imaging Optical Component Simulation) | | | |
| Required Background Knowledge for Trial： | | Nuwa | □ Semiconductor Physics and Band Theory  □ Semiconductor Microelectronic Device Physics  □ Principles of Semiconductor Lasers (optional)  □ Basics of Quantum Mechanics (optional) | | |
| Macondo | □ Basics of Wave Optics  □ Electromagnetic Field and Wave Theory  □ Principles of Silicon Photonic Devices  □ Basic Principles of FDTD Algorithm and Mode Expansion Algorithm | | |
| Rayzen | □ Geometrical Optics  □ Wave Optics (optional)  □ Non-Imaging Optical System Design  □ Imaging Optical System Design (optional)  □ Freeform Curve and Surface Modeling (optional) | | |
| Intentions for Purchase： | | □ Evaluation Only in the Short Term  □ Pre-Purchase Evaluation  □ Other: | | | |
| Source of Information about GMPT Products | | □ Official Website（www.gmpt.com.cn）  □ Articles or Videos  □ Recommended by Acquaintances or Friends：  □ Other: | | | |
| Would you require technical support from GMPT? | | □ Yes □ No | | | |

**Note：**

1. Please carefully fill out the application form above and the technical requirements form below. Once completed, send it to the designated email address: **trial@gmpt.com.cn**. Upon receiving your application, we will review and process it within 1-2 working days. The trial software will then be sent to the provided email address.

1. Kindly review and complete the technical requirements form on the following page. This will help us better understand your needs and provide the most suitable software. You may include any journal articles or topics of interest in your submission.
2. For detailed software descriptions and functionality, please visit our official website:：<https://www.gmpt.com.cn/>
3. GMPT offers professional services, including customized software development and physical mechanism analysis. For any special requirements, please contact us at[service@gmpt.com](mailto:service@sinopeda.com).cn 。

|  |  |  |  |
| --- | --- | --- | --- |
| **Nuwa Software Trial Technical Requirements Form** | | | |
| Materials Involved:  (Please specify the materials related to your trial application.) |  | Does the Application Involve Semiconductor Device Processes or GDS Import? |  |
| Device Types and Structures Involved: | Device types, such as HEMT, MOSFET, LED, PD, DFB, VCSEL, and other semiconductor devices./ Structures, including Type II detectors, quantum dots, multi-junction structures, electrode shapes, PSS, surface roughness, etc. | | |
| Desired Output Data or Achieved Outcomes: | Spatial distribution of various internal physical quantities such as electric field, potential, carrier concentration, and band structure./ Overall steady-state parameters of the device, including dark current, photocurrent, responsivity, response rate, and emission spectrum./Overall transient characteristics of the device, such as laser oscillation characteristics, relaxation phenomena, and high-frequency S-parameters. | | |
| Additional Notes :  (Please specify) |  | | |

|  |  |
| --- | --- |
| **Macondo Software Trial Technical Requirements Form** | |
| Materials Involved:  (Please specify the materials related to your trial application.) |  |
| Device Structures, Dimensions, and Parameters: | Examples include:  P**assive Devices:** Micro-ring resonators, multimode interferometers, directional couplers, etc./**Active Devices:** Electro-optic modulators, photodetectors, etc./ **Non-Waveguide Devices:** Gratings, MicroLEDs, CMOS image sensors, etc. (Attach relevant images or diagrams if available.) |
| Light Source Types and Input Methods: | Examples include:  Mode sources with a wavelength range of 1.5-1.6 μm./Waveguide ports for input/output with key metrics or data./ Plane waves, Gaussian beams, or dipoles. (Please provide references or images where applicable and describe clearly for faster review.) |
| Simulation Requirements (Output Data)**:** (Please specify your desired simulation outputs.) |  |
| Additional Notes: (References or Remarks) |  |

|  |  |
| --- | --- |
| **Rayzen Software Trial Technical Requirements Form** | |
| Materials Involved:  (Please specify the materials related to your trial application.) |  |
| Surface Scattering Properties: | Examples include:  Transmission or Reflection or Absorption rates/ Lambertian scattering/ Gaussian scattering parameters/ Fresnel losses/ Measured BSDF data files/ Harvey-Shack parameters/ Abg parameters/ Coating settings, etc. |
| Optical System Structures, Dimensions, and Parameters: | Examples include:  Backlight systems/ LED structures/ Fresnel lenses/ Lens optical-mechanical structures/ CAD modeling for complex shapes  (Attach relevant images or diagrams if available.) |
| Light Source Types, Intensity Distribution, and Spectrum: | Examples include:  Light source shapes/ Photometric distribution files/ Raydata files/ Spectral distribution, etc. |
| Simulation Requirements (Output Data)**:** (Please specify your desired simulation outputs.) | Examples include:  Illuminance or Intensity or Luminance analysis/ Color analysis/ Path analysis/ Visualization of specific physical quantities  (Attach relevant images or diagrams if applicable.) |
| Additional Notes (References or Remarks): |  |