PACIFIC TECHNICAL SOLUTIONS

Professional Engineering Services for General, Horticulture, Biomedical and Specialty Lighting

Smart lighting, sensor and controls integration

- Bluetooth-mesh/ZigBee radio and controller integration
- Bluetooth-mesh/ZigBee sensor integration
- CCT and RGBW color tuning
- Circadian rhythm lighting
- Scheduling, grouping, time clock and alert functionality
- Smartphone application development
- Global connectivity through gateways
- **Building Management System integration**
- Cloud connectivity
- Remote location and multi-site control

Optical system design

- Optical system design through computer assisted software (TracePro, OSLO and RayViz)
- Integrated opto-mechanical design (Solidworks and AutoCAD)
- Analysis and optimization
- Design to meet performance, budget and schedule requirements
- LED lighting design, LED panel and projector design, lens design, TV backlight design, light pipe design, illumination design for biomedical applications, solar lighting, automotive interior and exterior lighting, stray light analysis
- Coordinate photometric testing with outside laboratory, as needed
- Work directly with your marketing and product development team to complete projects successfully

Mechanical design and prototyping

- Product design and development
- 3D CAD solid modeling
- Thermal analysis
- Familiarity with manufacturing processes including injection molding, die-casting, extrusion and thermoforming
- Understanding of sheet metal, polycarbonate, acrylic and aluminum fabrication
- Prototyping by light CNC and 3D printing
- Industrial design
- High level of attention to detail and accuracy

Lighting layout and photometric simulations

- Construct 3D modeling, including architectural and furniture details as necessary
- Complete lighting layouts
- Perform photometric simulations, lighting calculations (daylight and electric, emergency, etc.) and comparisons
- Fixture schedules

About Us:

Ilkan Çokgör, PhD

President, Principal Engineer

For the past 29 years Dr. Cokgor has been designing systems, managing projects, leading teams and setting strategy in the optoelectronics field. He has a BSc in Electrical Engineering, an MSc in Electronics, and a PhD degree in Optoelectronics from King's College, University of London. He leads a design team of engineers to deliver projects on-time, meeting customer target specifications.











