

pmmw

Bright ideas

➔ 21 race-winning technologies, components and innovations for the new racing season

Interviewed

Don Schumacher

Owner, Don Schumacher Racing

David Richards

Chairman, Prodrive

Michael Guasch

Founder, Molecule Labs

Steve Henderson

VP, Dow Automotive

Thierry Reynaud

Promoter, Circuito Monteblanco

Series focus

Production Car World Rally Championship

Brake technology

The future for by-wire brakes and materials development

Brazilian Stock Car

Gary Anderson investigates the South American series



WORDS BY FRANK MILLARD

"I AM MUCH MORE of an entrepreneur and a businessman than a college kid," says Michael Guasch, founder of Molecule Labs, who left full-time higher education early to learn his craft on the job. Now his experience as a cleaning specialist and amateur racing driver has been combined to produce a system for cleaning race suits and protecting them from fuel absorption – the chemistry of which has military applications and might even extend to the inner workings of race engines.

Guasch, who sold his previous chemical company to Dupont a couple of years ago, has had his products tested by USA-based SFI Foundation, Inc, and Nomex fabric that was treated with each product has been tested for flame resistance. "Nothing has increased the flame; nothing has reduced Nomex's flame resistance," Guasch explains. "The protector is a patented fluorine-based formula to create fuel repellency for Nomex. We polymerize fluorine into a unique molecule; the properties of fluoropolymers are such that they will repel water and oil, so that's how we get the oil repellency and, ultimately, gasoline repellency. Sixty to 80% gasoline repellency is going to be very important so that fuel spills don't soak into the fabric."

The company estimates the motorsport market for its product to be worth about US\$10 million and is currently working with Nomex racing suit manufacturers to endorse and/or distribute its products. "That's working fine and the product is selling nicely," observes Guasch. "I'm also talking to a company in the UK, which carries out cleaning and embroidery work, and is supplying most of the Nomex suits for five of the F1 teams and most of the WRC teams."

Guasch is looking forward to refining and expanding his product range. To this end about US\$2.5 million is being invested in R&D. "We're working with fire-resistant fabric manufacturers that supply fabrics for fire-resistant suits for the military in places such as Iraq," he reveals.

The company is also looking at different ways to give metals oil resistance, and at its inversion to attract oil: "That's something that we've been looking at for the motorsport industry – you could actually treat a metal surface with this product so oil does not shed away from it," explains Guasch. "So with regard to gears and transmissions, it will keep the oil between the gears instead of it running off, therefore creating better lubricity and longer life for the parts." ❖

MICHAEL GUASCH HAS INVENTED
A PRODUCT TO KEEP FUEL AWAY
FROM NOMEX FABRIC