



David Abecassis Bio Director of Technology



Summary:

David Abecassis is an interdisciplinary scientist with a degree in natural sciences and a bachelor's degree in biological chemistry from the University of Toulouse France. He then went on to complete a Joint Master's degree from Rutgers University where he studied biodegradation with Richard Bartha at Cook College. Upon graduation he worked in diversified polymer consulting which included a variety of polymer driven applications, everything from diapers to packaging to aerospace composites. He spent over 10 years in collaborative research in the field of thermoplastic nanocomposites with Stony Brook University and Brooklyn Polytechnic Faculty, which included novel flame-retardant packages, and eventually the world's first mass produce able organoclay. David Abecassis is a pioneer in adapting his cutting-edge knowledge to biodegradable materials and sustainable plastics. As Director of all Technology for Titan Bioplastics, he heads up R&D as well as IP efforts and implementation.

Titan Bioplastics, LLC – 2017 – Present

Director of Technology

- Oversee development and implementation of all biocomposite technology solutions.
- Provide application expertise in the use of advanced Nano technologies, including Graphene
- Develop multiple bioformulation and green plastic solutions for Fortune 50/500 companies.
- Develop custom applications of master batch formulations
- Co- Develop solutions for plastic manufacturer client bases.
- Oversees innovation development in hemp material technologies- incl hemp graphene and supercapacitors.

Green Growers Technology Alliance, LLC 2015-present

Managing Director

- Strategic Planning, Executive Management of Team
- Discovered original microbial auxin for use in plant growth and developed commercial product line. GEO
- Cannabis specific line of grow products. GEO-TM. Immunify-TM
- Developed GEO-TM Puretech to meet Massachusetts organic demands



President, Biogard, Inc. 2010-2015.

- Market-driven green innovation company based in chemistry, microbiology and soil science.
- Marketed “green” patented technologies

Company is registered with Boston MBTA as a vendor- Biogard products have been tested and approved. Company has all green bioremediation products, including leaching barriers and soil normalization technologies. Products were approved for EU use by OVAM in Belgium in 2004. Company has and markets certified organic farming compatible non-polluting agricultural amendment. First cost-effective nitrogen removal system for septic water treatment: **Nitro-CesTM**.

President, Industrial Polymer Research & Engineering Corp. 1997- 2014

- Head up diversified polymer consulting group.
- Intellectual property licensing for inventors-over 300+ patent filings on behalf of clients.
- NYIT- Graduate Thesis Advisor 2013-present
- Department of Energy and Environmental Studies Old Westbury NY

Education:

- Joint MS. Rutgers University, Cook College 1990-1994 Texaco Foundation Fellow.
- New Brunswick NJ.-Biotechnology/Environmental Science. Richard Bartha’s Lab.
- BS. Biological and Organic Chemistry, Paul Sabatier University of Sciences. 1989, Toulouse France
- Associates Degree (DEUG) Natural Sciences 1987 -Toulouse France

Achievements

- **Developed world’s first mass producible nanotechnology platform for plastics.**
- Ranked 7473 worldwide as inventors.

Toward A New Generation of Super plastics”.

- Developed world’s first non-GMO, cost-effective USDA certified-organic farming- compatible chitinase technology.
- Invented world’s first cost-effective nitrogen removal system for septic wastewater.
- Headed up team that developed foam stabilizer for Dow Chemical’s “Great Stuff” both latex and acrylic formulas.
- Developed first effective add-mix for concrete for efflorescence blockage. (for then Masterbuilders, now BASF Add Mix)
- Developed first nano-composite coating for decorative concrete.



Issued IP

- 8,272,842 Polymer nanocomposites for air movement devices
- 8,022,123 Method for manufacturing and dispersing nanoparticles in thermoplastics
- 7,605,206 Method of compatibilizing non polymer solid fillers in polymeric materials and compositions therefrom.
- 7,553,898 Flame retardant plastic compositions
- 7,517,930 Polymer nanocomposites for air movement devices
- 7,595,061 Method for using an induced formation of chitinase in lawn and garden soil for the control of destructive insects and microorganisms therein

Published Applications

- 20100261820-Novel method for manufacturing and dispersing nanoparticles in thermoplastics
- 20100152348- Nano compatibilized novel polymer blends
- 20100029986 -Novel amine functionalized carbon nanotube
- 20090326125 - Flame retardant non halogenated silicone composition for high temperature and automotive and building construction applications
- 20090196759 Polymer Nanocomposites for Air Movement Devices
- 20090176911Novel masterbatch thermoplastic delivery system
- 20090042044 Novel nanocomposite coating for the reduction of pigment particles loss and UV fade and chemical degradation for decorative & structural products made from concrete and concrete composites
- 20090012211Novel biodegradable nanocomposites
- 20080317987Nanocomposite materials for ethanol, methanol and hydrocarbon transportation use and storage
- 20080234408Novel method for producing an organoclay additive for use in polypropylene
- 20080227899Novel method for polymer RDP-clay nanocomposites and mechanisms for polymer/polymer blending
- 20080207808Novel mechanism for immiscible polymer blend compatibilization
- 20080071013Novel thermoplastic pelletizing technology
- 20080064802Method for polymer-polymer compatibilization and non-polymer filler dispersion and compositions made therefrom.
- 20080064798Novel method for nanoclay particle dispersion
- 20080023679 Novel flame retardant nanoclay
- 20070135545Flame retardant plastic compositions
- 20070132144 Partially compatibilized PVC composites
- 20070106007 Method of compatibilizing non polymer solid fillers in polymeric materials and compositions therefrom
- 20060287421Flame retardant non halogenated silicone composition for high temperature and automotive and building construction applications
- 20060030660 Polymer nanocomposites for air movement devices.