MATERIALS, TECHNOLOGIES, RESEARCH – MTR Ltd.

APPLICATION of MTR's HIGH – PURIFIED FULLERENES C60

****

" Synthesis and AntiTumor Activity of Novel Pyridinium Fullerene Derivatives " – Intern. Journal of NanoMedicine, 14, 6325-37, August 2019

Non Human Primates: " CarboxyFullerene NeuroProtection Postinjury In Parkinsonian Non Human Primates " – Ann Neurol. 2014,76(3),393-402

"A CarboxyFullerene SOD mimetic improves Cognition and extends the LifeSpan of Mice " – Neurobiology of Aging, 2008, 29, 117-128

" Anti-Aging Nutritional Supplement Compositions for Animals " US9682150B1 (High-Purified Fullerenes C60)

" CarboxyFullerenes and Methods for Use Thereof " Patent: US20030162837A1 & WO2003072802A3

" Fullerene-based AntiOxidants and Neurodegenerative Disorders " Parkinsonism Relat. Disord., 2001, 7(3), 243-246

" COSMETIC Compositions containing Fullerene Cluster " Patent: WO2006001784A1 (High-Purified Fullerenes C60)

" Safety Evaluation of HIGHLY PURIFIED Fullerenes (HPFs) based on Screening of Eye and Skin Damage " – J.Toxicol.Sci., 2009,34(5),555-562

" Process for Production Fullerenes " – Patent: WO2003040035A1

" Raman Spectroscopic Measurements of Vacuum-Deposited C60 Thin Films " – Proc.NAP 4, 01MAN02-2015 (Sublimed C60,99.99%)

" Unique Crystallization of Fullerenes: Fullerene Flowers " – Sci. Reports [6:32205] DOI:10.1038/srep32205 – 2016 (High-Purified C60 & C70)

“ Extraction and HPLC Analysis of C60, C70 in Synthetic and Natural Waters “ – J. of Chromatography, 2008, 1203(2), 153-159

“ Low and High Temperature Infrared Spectroscopy of C60 and C70 “ - Fullerenes, Nanotubes and Carbon Nanostructures, 2010,18,224-235 (High-Purified Fullerenes C60 & C70)

“ Preparation of Optically Transparent Graphitic Film by Phase Transformation of C60 Molecules “ – Sensors and Materials, 2017, 29(6),785

“ Fullerene–Related Nano Carbons and Their Application”
J. of NanoTechnology, 2012, Article ID610408

“ Organic Photosensitive Devices using Subphthalocyanine Compounds “
Patent: US20110253992A1

“ On the Molecular Extinction Coefficients of the Electronic Absorption Spectra of C60 and C70 Fullerenes Radical Cation “ – Eur.Chem.Bull., 2013, 2(12), 1013-1018 (High-Purified Fullerenes C60)

“Self-Assembled Fullerene Crystals as Excellent Aromatic Vapor Sensors”
Sensors, 2019, 19, 267 (High-Purified Fullerenes C60)

“Precise Raman measurements of C60Fullerene Nanowhiskers synthesized using the liquid-liquid interfacial Precipitation Method” – Trans.Mat.Res. Soc.Japan, 2016, 41(3), 289-295 (Sublimed C60,99.99%)

“ C70 Fullerene Tube and Process for Production the same “
Patent: US8119093B2 (High-Purified Fullerenes C70)

“ Adsorption of Aminoacids by Fullerenes and Fullerene Nanowhiskers “ – Sci.Technol.Adv.Mater.,16 (2015) 065005 (6pp)

“ TEM and Raman Spectroscopy Analyses of Fullerene Nanowhiskers and Nanotubes “ – NSTI, Japan - NanoTech.,2, 2007 (High-Purified C60)

STM (Scanning Tunneling Microscopy): “ Crystalline C60 Monolayers at the solid-organic solution Interface “ - J.Mater.Chem., 2002,12,3366-67

APPLICATION of MTR's WATER-SOLUBLE FULLERENES C60 :
****
FULLERENOLS (With a Great Water Solubility > 50g/L)
****

" Systematic Evaluation and Mechanistic Investigation of AntiOxidant Activity of FULLERENOLS using betta-Carotene Bleaching Assay "
J. of NanoMaterials, v.2014, Article ID802596

" PolyHydroxyFullerene Sunscreen active Agents and Compositions "
WO2017136809A1 & US20190053991A1

"Water-Soluble Fullerene Materials for BioApplications" - J. Name,2012,1

" Design and Synthesis of Macromolecular Imaging Probe - Photodynamic Therapy Photosensitizer " – Diss.ETH No.24105, 2017

" Study of the Optical Power of NanoPhotonic Soft Contact Lenses based on Poly-HEM and Fullerene " – Contemporary Materials, v-1, 151, 2014

" Organic Solar Cell and Manufacturing Method Therefor "
US2017/0062745A1