New Coatings and New Coatings Raw Materials Ninth Symposium

North Dakota State University is Host

The Ninth Annual Symposium on New Coatings and New Coatings Raw Materials, sponsored by the Polymers and Coatings Department of North Dakota State University will be held at the Fair Hills Resort on Pelican Lake, near Detroit Lakes, Minnesota, June 5–8, 1967.

There will be three subsymposiums; 1) Electro-Deposition, 2) Solubility Parameter, 3) High Temperature Coating Systems. In addition, there will be a number of General Papers.

General Papers

The Latest Developments in Clean Air, Dan Ring, Council, NPVLA.

Development of Epoxy Coating Systems for Steel Structures, P. R. Yingst, CIBA Products Company.

Studies at the Northern Regional Research Laboratory on Pigment Activity in and Film Properties of Linseed Oil Paints, R. L. Eissler and L. G. Princen, Northern Regional Research Laboratory.

Some New Structural Developments of Phenolics, R. H. Peterson, NDSU.

Hexakis (methoxymethyl)melamine: Its Chemistry and Utilization in Surface Coatings, J. C. Petropoulos and J. N. Koral, American Cyanamid Company.

Nuclear Magnetic Resonance Spectroscopy and Its Applications to Coatings Chemist, L. C. Afremow, DeSoto Chemical Coatings Co.

Alkyd Resins: A Discovery Due to an Accident of Nature, R. J. Blackinton, Interchemical Corp.

Symposium on Electro-Depositions

Development of Electrocoating Systems Utilizing an Amino Cross-Linking Agent, J. N. Koral and W. J. Blank, American Cynamid Company.

Factors Effecting the Throwing Power of Electrocoating Polymers, Ralph Swanson, E. I. duPont de Nemours and Company, Inc.

Attenuated Total Reflectance and Transmitted Infrared Spectra of Electrodeposited Acrylic Resin Films, A. T. Usmani and A. E. Rheineck, NDSU.

Symposium on Solubility Parameters

Computer Methods in Solubility Parameter Theory, R. N. Satterfield, NDSU.

Solubility Parameter and Its Correlation with Structure, K. L. Hoy, Union Carbide.

A Three-Dimensional Approach to Solubility. III, J. D. Crowley, G. S. Teague, Jr., and J. W. Love, Jr., Eastman Chemical Products.

Symposium on High Temperature Coating Systems

Heterolinked Polyaromatic Thermoplastics: Structures, Properties and Applications, H. A. Vogel and W. D. Womer, 3 M Company.

Heat-Resistant Polymers; Some Recent Work on Polyheteroaromatics, B. M. Culbertson, Archer Daniels Midland Company.

The Effect of Polymer Structure on the Degradation of Heterocyclic Polymers, G. P. Shulman, Martin Company.

High Temperature Resistant Coatings, C. E. Hathaway and J. M. Butler, Monsanto Company.

New Resin Systems for High Temperature Coating Applications, Frank Fekete, Koppers Company.

Registration Information

For further details address inquiries to: Polymers and Coatings Department, College of Chemistry and Physics, North Dakota State University, Fargo, N. D.

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THE EFFECT OF OXYGEN PRESSURE ON THE OXIDATION OF FATS. R. Marcuse (Swedish Inst. for Food Preserv., Goteborg, Sweden). *Riv. Ital. Sostanze Grasse* **43**, 302–9 (1966). The methods used by the food processing industry to protect against fat oxidation are surveyed with special emphasis on processing and storing fat-containing foods under reduced oxygen pressure. Examples of practical applications and experimental results are given.

ELAIDIC ACID IN OLIVE OIL. E. G. Mondino (S.A.I.C.A., Castelvetrano, Italy). *Olearia* **19**, 220–6 (1965). A capillary gas chromatographic method has been used for determining the elaidic acid content of several samples of olive oil. The presence of a peak in the *trans*-oleic position has always been noted, with indications, however, that the peak is due to a mixture of several components rather than to elaidic acid alone.

PICKLED OLIVE FRUITS AT THE PRESENT TIME. G. Savastano (Olive Exper. Station, Genoa, Italy). *Riv. Ital. Sostanze Grasse* **43**, 207–13 (1966). The present status of the pickled olive industry is discussed.

HYDRAULIC AND HYDROPNEUMATIC CONVEYING IN OLIVE OIL MILLS. A Chelazzi (Veraci S.p.A., Florence, Italy). *Riv. Ital. Sostanze Grasse* **43**, 432–7 (1966). The principles and machinery used in olive oil mills for handling and conveying olives are reviewed.

RHEOLOGICAL STUDIES ON OLIVE OIL EXTRACTION. J. M. Martinez-Moreno *et al. Ind. Alim.* **5**, 71–5 (1966). A rheological model is proposed that permits the theoretical treatment of the physical processes occurring during mechanical oil extraction.

MARGARINE OILS. P. Seiden (Procter & Gamble Co.). *U.S. 3,298,837.* A margarine oil adapted to be manufactured into margarine of good spreadability, oil-off, slump and eating quality is claimed. It consists of an oil selected from the group consisting of soybean oil, cottonseed oil, corn oil, sunflower oil and mixtures thereof, and an oil selected from the group consisting of 5–30% by wt., coconut oil, 10–40% palm oil, and 10–40% palm kernel oil, and containing 0.2–2.5% of rapeseed oil hydrogenated to an I.V. of less than 30, the combined fatty acid content of the rapeseed oil being at least 10% of acid selected from the group consisting of arachidic acid, behenic acid, and mixtures thereof.

FAT CRYSTALLIZATION. C. C. Loo (Carnation Co.). *U.S. 3,301,682.* A composition is described, comprising an integrally formed dried product consisting of individual parts, each having a fat composition and a non-fat composition that is immiscible in the fat. The non-fat composition coats the high and low melting point fat fractions to effectively separate the high- and low-melting components of the fat mixture.

• Fatty Acid Derivatives

USE OF ESTERS OF N-HYDROXYSUCCINIMIDE IN THE SYNTHESIS OF N-ACYLAMINO ACIDS. Y. Lapidot, S. Rappoport and Y. Wolman (Dept. Biol. Chem. and Dept. of Organic Chem, The Hebrew Univ. of Jerusalem, Israel). *J. Lipid Res.* **8**, 142–5 (1967). Several crystalline N-hydroxysuccinimide esters of short- and long-chain fatty acids have been synthesized. These compounds react with free amino acids to form preferentially N-acylamino acids. The reaction of the N-hydroxysuccinimide esters wtih hydroxylamine and the behavior of the N-acylamino acids on thin-layer chromatography are described.

APPLICATION OF THE ROSENMUND REACTION TO THE SYNTHESIS OF SATURATED FATTY ALDEHYDES. H. B. White, Jr., L. L. Sulya and C. E. Cain (Dept. of Biochem., Univ. Miss. School Med., Jackson, Miss. 39216). *J. Lipid Res.* **8**, 158–60 (1967). A method is described for the simple and rapid formation of saturated fatty aldehydes from the corresponding acid chlorides. It is not suitable for the preparation of unsaturated aldehydes because of the partial reduction and positional and geometrical isomerization of the double bond in the chain.

LIQUID STABILIZERS FOR VINYL CHLORIDE-RESINS COMPRISING METAL SALTS OF EPOXIDIZED FATTY ACIDS. A Szczepanek and G. Koenen (Chem. Fabrik Hoesch K. G.). *U.S. 3,297,584.* Liquid stabilizers for polymeric and copolymeric vinyl chloride are described, comprising a solution containing 40–60 wt. per cent of a barium, zinc or cadmium soap of epoxy stearic acid, diepoxy stearic acid or hydroxy epoxy stearic acid in an organic solvent capable of simultaneously serving as a plasticizer and/or stabilizer for the polymeric vinyl chloride such

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