

Digital Media Fab Lab – Resources + BioMaterials

Davis, C. (2020, May 07). *The Secrets of Bioplastics*. Retrieved from Issuu:

https://issuu.com/nat_arc/docs/the_secrets_of_bioplastic

Keywords: Bioplastics, Fab Textile Lab, Bioplastic Recipes, Open Source, Self-Published Documentation, Fab Textile Internship, Issuu, Sustainability, Agrosource, Glycerin, Gelatin

Summary: Research and documentation of Bioplastic experiments.

Call to Action: Change habits of material consumption and find alternatives to better respect the environment.

Dunne, M. (2020, June 16). *Bioplastic Cook Book*. Retrieved from Issuu:

https://issuu.com/nat_arc/docs/bioplastic_cook_book_3

Keywords: Bioplastic, Biodegradable, Biocomposite, Glycerin, Flexibility Scale, Fabrication Method, Spirulina, Gelatin, Natural Pigments, Sugar, Clay, Corn Starch, Soap, Burlap, Hemp, Carbon Footprint, Waste Management, Disposal Methods, Compost

Summary: A catalogue of bioplastic recipes

FABTEXTILES. (n.d.). Retrieved May 07, 2020, from FABTEXTILES: <https://fabtextiles.org/>

Keywords: Open Source, Fashion Production, Global Innovation Ecosystem, Innovation

Summary: Web platform dedicated to showcasing methods of creation, production, and distribution of innovative wearables.

Call to Action: Change fashion creation, production, and distribution from the ground up.

Lab, G. (2020, May 07). *Green Lab: Working Towards A More Sustainable Planet*. Retrieved from Green Lab:

<https://greenlab.org/>

Keywords: Sustainable Food Systems, Circular Systems, Sustainability, Circularity, Collaboration, Co-Creation, Design-Led Research, Material Lab, Fab Lab, Grow Spaces, Bio Lab, Open Innovation Lab, Organic Material Research,

Summary: London-based collaborative space designed to support radical change in the way food is produced and consumed.

Call to Action: Collaborate and Innovate with them for sustainable water, food, and waste systems.

Materiability. (n.d.). *Bioplastic*. Retrieved May 07, 2020, from Google Drive Document:

<https://drive.google.com/file/d/0ByT1im7tzFVbZINhME80aHFflazlHeDA1dEttUhfQk5LbUNN/view>

Keywords: Materiability, Material Research, Publishing Example, Gelatine-based Bioplastic, Material Evaluation, Starch-based Bioplastic, Casein-based Bioplastic

Summary: Open source recipes for bioplastic.

Call to Action: Accessibility to alternative expressions of materials.

Materials Library. (n.d.). Retrieved May 07, 2020, from Materiom: <https://materiom.org/>

Keywords: Open Source, Recipe Book, Biomaterials, Biomass, Sustainability, Waste-to-Reuse, Water Conservation, Open Data, Regenerative, Circular Economy, Agricultural Waste, Agar, Algae, Coffee Grounds, Cabbage, Dye, Glycerin

Summary: Platform for a collaborative network of materials labs to offer open source recipes and data on material development in sustainable and biodegradable organic materials.

Call to Action: Utilize the recipes within the archive, be inspired, cultivate new material knowledge, join the movement, contribute, develop ecological and economical practices within local community.

Pistofidou, A. (n.d.). *Issuu*. Retrieved from Bioplastic Cook Book:

https://issuu.com/nat_arc/docs/bioplastic_cook_book_3

Keywords: FabTextiles, Bioplastics, Cook Book, Recipe Book, Biopolymer, Plasticizer, Thermoplastics, Wax, Food Waste, Waste-to-Reuse, Biocomposite, Glycerine, Red Algae, Agar Agar, Corn Starch, Clay, Spirulina, Burlap, Hemp, Jute, Cellulose, Lignin, Impregnated Fabrics, Material Observations

Summary: Bioplastic Cook Book with recipes and helpful tips to consider applying to material research. Material observations, considerations and evaluation are also included.

Call to Action: Be inspired, cultivate new material knowledge, utilize the material within the cook book for enhancement of localized material production.

Ribeaux, T. (n.d.). *Bioplastic Cookbook for Ritual Healing from Petrochemicals*. Retrieved from Bioplastic Cookbook:

<http://bioplastic-cookbook.schloss-post.com/index.html>

Keywords: Bioplastics, Cookbook, Recipes, Gelatin, Agar Agar, Plastiglomerate, Hawaii, Pele, Petrochemical,

Summary: Recipe protocols and storybook with resources “for reclaiming, rebuilding, and healing from the extractive and destructive processes of techno-capitalism by open sourcing” alternatives to materials and material relationships.

Call to Action: Cultivate awareness and participate in the culture of open source sharing about material culture.

Stevens, E. (2002). *Green Plastics: An Introduction to the New Science of Biodegradable Plastics*. Princeton University Press.

Keywords: Performance Integrity, Photodegradation, Scission, Oxidative Degradation, Degradation, Bioplastics, Recipes, Composting, Stewardship, Renewable Materials, Raw Materials, Collision Theory, Reuse, PLA, Cotton, Renewable Feedstock, Pullulan, Ebonite, Gutta Percha, Collodion, Waterproof Bioplastics, Pectin, Agar, Chitosan, Chitin, Cellulose, Cellulose Acetate, Carrageenan, Semisynthetic

Summary: A overview of plastics, bioplastics, policies, and prospects for the future of plastics. Recipes for Bioplastics are provided.

Call to Action: To create sustainable production for the future choose renewable feedstocks/resources for bioplastic production. Consider biodegradable and compostable materials to sustain population growth and create closed loop systems.

References

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https://issuu.com/nat_arc/docs/bioplastic_cook_book_3
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- Stevens, E. (2002). *Green Plastics: An Introduction to the New Science of Biodegradable Plastics*. Princeton University Press.