

**DeMaMech
EU-Japanese-Program
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Tina Wilczynski

**Prof. Hideki Aoyama Lab
System Design Engineering**



I. Wrinkle Surface and Computer Simulation?

- Useful tool particularly in the field of manufacturing process.
- Computer generated shaded images not so realistic
- Problem: surface tend to look artificial due to their extreme smoothness
- Needed: means of simulating the surface irregularities that are on real surfaces
- Idea: using parameter values of parametrically defined surfaces
- tying the texture pattern to the parameter values

What are Fractals?

- Mathematical (strictly geometrical) creatures
- Can have “*Non Integer*”
- Main difference to classic geometrical objects are the “*Dimensions*”
- Self similar structure →
$$d = \frac{\log a}{\log \frac{1}{S}}$$

• Conclusion

- Texture with artistic effects of texture processing decorate articles of all kind of materials with help defines
- There are no materials completely void to texture processing
- Outstanding decorativeness increases product value
- Enhances commercial value, and prevents problems due to scratches and blemishes
- Product textures are determined from the dual perspectives of functionality and creative design after accurately identifying product needs.

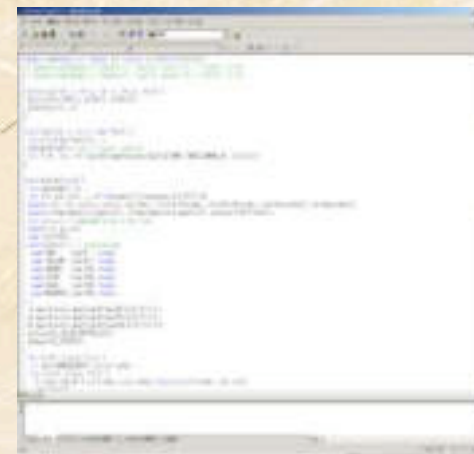
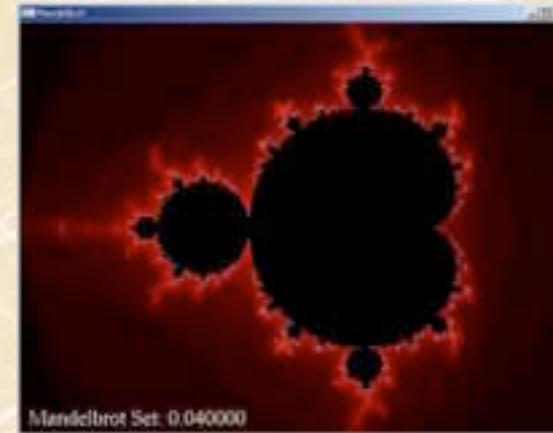


II. Program

1. Koch Snowflake



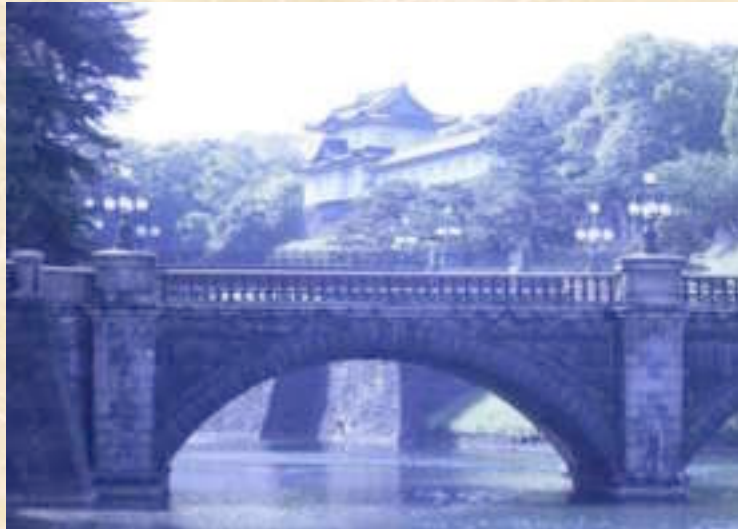
2. Mandelbrot



III. Japan University and Life



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04.10.2005 Tina Wilczynski

