1022-35-163 **Yulia Karpeshina*** (karpeshi@math.uab.edu), Department of Mathematics, UAB, 1300 University blvd, Birmingham, AL 35294-1170, and **Young-Ran Lee**. *On Polyharmonic Operators with Limit-Periodic Potential in Dimension Two.*

We consider a polyharmonic operator $H = (-\Delta)^l + V(x)$ in dimension two with $l \geq 6$ and $V(x)$ being a limit-periodic potential. We prove that the spectrum of H contains a semiaxis and there is a family of generalized eigenfunctions at every point of this semiaxis with the following properties. First, the eigenfunctions are close to plane waves $e^{i(\vec{k},\vec{x})}$ at the high energy region. Second, the isoenergetic curves in the space of momenta $\vec{k}$ corresponding to these eigenfunctions have a form of slightly distorted circles with holes (Cantor type structure). Third, the spectrum corresponding to the eigenfunctions (the semiaxis) is absolutely continuous. (Received September 12, 2006)